Weston Solutions, Inc.
East Division
3 Riverside Drive
Andover, Massachusetts 01810
978-552-2100 - Fax 978-658-0700

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT EP-W-05-042

21 August 2013
20114-081-998-0850-49
DC No. A-6844

Ms. Martha Bosworth
U.S. EPA Region I - New England
Emergency Planning & Response Branch
5 Post Office Square, Suite 100
Mail Code OSRR07-2
Boston, Massachusetts 02109-3912

Subject: Case No. 43392; SDG No. A4B24
ChemTech Consulting Group (Chem)
Jard Company Inc
Bennington, Vermont
AROCLOR: 19/Soil/A4B24-A4B29, A4B33, A4B35, A4B17-A4B23, A4B30-A4B32, A4B34
(Field Duplicates A4B25/A4B26)
5/Aqueous Equipment Blanks/A4B02, A4B05, A4B06, A4B08, A4B10
2/Soil PEs/A4B56, A4B57
CERCLIS No. VTD048141741
TDD No. 12-10-0008, Task No. 0850-49

Dear Ms. Bosworth:

A Tier II validation was performed on the organic analytical data for 19 soil samples and five aqueous equipment (rinsate) blanks collected by WESTON START at the Jard Company Inc site in Bennington, Vermont, and for two PE samples obtained from EPA Region I. *Italicized sample ID numbers in the list above are associated with samples in this SDG, but reported in another SDG.* The samples were analyzed under CLP following SOW SOM01.2 as low/medium level for Aroclor compounds. The data were evaluated as Tier II level in accordance with the "Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses" dated December 1996, and the USEPA CLP National Functional Guidelines for Superfund Organic Methods, and were based on the following parameters:

	•	Overall Evaluation of Data and Potential Usability Issues.
*	•	Data Completeness.
*	•	Preservation and Technical Holding Times.
*	•	GC/MS and GC/ECD Instrument Performance Checks.
*	•	IC and CC.
*	•	Blanks.
	•	Surrogate Compounds.
NA	•	IS.
*	•	MS/MSD.

*	•	Field Duplicates.
NA	•	Sensitivity Check (MDL Study or LFB).
*	•	PE Samples/Accuracy Check.
	•	Target Compound Identification.
*	•	Sample Quantitation and Reported Quantitation Limits.
NA	•	TICs.
*	•	SVOC and PEST/PCB Cleanup.
*	•	System Performance.
NA	•	SEDD/ADR.

* = No qualifications will be applied based on this parameter.

Table I summarizes overall evaluation of the data with reference to the DQO and potential usability issues. Qualified data are summarized in Data Summary Table 1.

Overall Evaluation of Data and Potential Usability Issues

See Table I for overall evaluation of data and potential usability issues.

Preservation and Technical Holding Times

Aroclor samples A4B17-A4B18, A4B23-A4B29, and A4B30-A4B34 were extracted between 2 and 4 days beyond the holding time specified in SOM01.2. Based upon the holding times articulated in SW-846, the Chlorinated Biphenyl Congener Statement of Work CBC01.2, and in consultation with USEPA Region I Quality Assurance chemists, the holding time for Aroclors has been established as up to 1 year. The positive and non-detected Aroclor results will not be qualified.

Surrogate Compounds

AROCLORS:

Samples in which two or more Aroclor surrogate recoveries did not meet criteria are summarized in the following table:

Sample No.	No. of Surrogates Out	Action Pos/ND
A4B17	4	Accept
A4B17DL	4	Accept
A4B18	4	Accept
A4B18DL	4	Accept
A4B21	4	Accept
A4B21DL	4	Accept

Sample No.	No. of Surrogates Out	Action Pos/ND
A4B22	1	None

Sample results will be qualified as indicated above.

PE Samples/Accuracy Check

The criteria used by START for qualification of sample data based on the PE sample results are as follows:

PE Score	Action	
	Non-Detects	Positive Results
In Window	Accept	Accept
Warning Low/High	Accept	Accept
Action Low	Reject (R)	Estimate (J)
Action High	Accept	Estimate (J)
TCL Misses	Reject (R)	Varies
TCL Contaminants	Accept	Varies
TIC Misses	Varies	Varies
TIC Contaminants	Varies	Varies

All non-compliant PE scores were investigated by checking raw data, calculations, calibrations, possible matrix interferences, and blank contamination. Unless otherwise noted, all results reported by the laboratory were found to be correct, based on the data generated by the laboratory.

The laboratory properly identified and quantified the soil Aroclor-1242 PE sample (A4B56, PE No. ASX0184). No qualifications were applied.

The laboratory properly identified and quantified the soil Aroclor-1260 PE sample (A4B57, PE No. AS1507). No qualifications were applied.

Target Compound Identification

The dual column correlation did not meet %D confirmation criteria for the following Aroclor compounds:

Sample	Compound	% D	Action
A4B27	Aroclor-1242	72.7	J
A4B23	Aroclor-1242	26.7	J
A4B34	Aroclor-1242	46.4	J

Actions:

J = Estimate results when %D >25 but <100 for pesticides or %D >25 but <500 for PCBs.
R = Reject results when %D >100 for pesticides or %D >500 for PCBs.
U = Qualify result as undetected at the CRQL when %D >100 for pesticides or %D >500 for PCBs, and both results are less than the CRQL.

Sample results have been qualified as indicated above.

Please contact the undersigned at (978) 552-2100 if you have any questions or need further information.

Very truly yours,

WESTON SOLUTIONS, INC.
Region I START

William W. Mahany
Principal Project Scientist

John Burton
Lead Chemist

email cc: Jennifer Feranda (CLP PO - Region II) - DV Letter w/Data Tables, and ORDA Form only – Feranda.jennifer@epa.gov

Attachments:
Table I: Overall Evaluation of Soil Data
Data Summary Key
Acronym List
Data Summary Table 1
DV Worksheets
PE Sample Score Reports (included in DV worksheets)
Field Sampling Notes (including a copy of sampler's COC Records)
CSF Audit (DC-2 Form) - Evidence Audit Photocopy (Including CSF Receipt/Transfer Form)
DQO Summary Form

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TABLE I

JARD COMPANY INC
Case No. 43392; SDG No. A4B24

Overall Evaluation of Soil Data

AROCLORs					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
1. To obtain sufficient data from surface and subsurface soil samples collected at the Jard Company site for PCB (Aroclor) analysis, to document potential source areas located on and off the property, and to document contamination in the soil and sediment associated with source areas located on the property.	*Analytical Method:* Yes, SOM01.2 *Sampling Method:* Yes, Hand Augers, and Stainless Steel Scoops.	Refer to qualifications in attached Data Summary Table 1. 1	Refer to qualifications in attached Data Summary Table 1.		1. Positive Aroclor 1242 results in samples A4B23, A4B27, and A4B34 were estimated (J) due to poor dual-column correlation.

* The evaluation of "sampling error" cannot be completely assessed in data validation.
** Sampling variability is not assessed in data validation.

DATA SUMMARY KEY
ORGANIC DATA VALIDATION

J	=	The associated numerical value is an estimated quantity.
R	=	The data are unusable (compound may or may not be present). Resampling and reanalysis are necessary for verification. The R replaces the numerical value or SQL.
U	=	The compound was analyzed for, but not detected. The associated numerical value is the SQL or the adjusted SQL.
UJ	=	The compound was analyzed for, but not detected. The associated numerical value is the estimated SQL.
EB	=	The compound was identified in an aqueous EB that was used to assess field contamination associated with soil/sediment samples.
TB	=	The compound was identified in an aqueous TB that was used to assess field contamination associated with soil/sediment samples.
BB	=	The compound was identified in an aqueous BB that was used to assess field contamination associated with soil/sediment samples.

ACRONYM LIST
ORGANIC DATA VALIDATION

AQ	aqueous
AQ FB	aqueous field blank
BB	Bottle Blank
B/N	base/neutral compound
°C	degrees Celsius
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CLP	Contract Laboratory Program
COC	Chain-of-Custody record
COR	Contracting Officer Representative
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
%D	percent difference
DAS	Delivery of Analytical Services
DMC	Deuterated Monitoring Compound
DQO	Data Quality Objective
DV	Data Validation
DW	drinking water
EB	Equipment Blank
EPA	Environmental Protection Agency
GC/ECD	Gas Chromatograph/Electron Capture Detector
GC/MS	Gas Chromatograph/Mass Spectrometry
GW	groundwater
IC	Initial Calibration
IS	Internal Standard
kg	kilogram
L	liter
LCS	Laboratory Control Sample
LFB	Laboratory Fortified Blank
MDL	Method Detection Limit
µg	microgram
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	non-detected result
ng	nanogram
NERL	New England Regional Laboratory
OSC	On-Scene Coordinator
ORDA	Organic Regional Data Assessment
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl compound
PEST/PCB	pesticide/polychlorinated biphenyl compound
PE	Performance Evaluation
Pos	positive result
QC	Quality Control
%R	percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
SDG	Sample Delivery Group
SOW	Statement of Work
SQL	Sample Quantitation Limit
S/S	soil/sediment
S/S (m)	soil/sediment medium level
START	Superfund Technical Assessment and Response Team
SVOC	semivolatile organic compound
SW	surface water
TB	Trip Blank
TCL	Target Compound List
TDD	Technical Direction Document
TIC	Tentatively Identified Compound
TR	Traffic Report
VOC	volatile organic compound
WESTON	Weston Solutions, Inc.

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4B24
LABORATORY: CHEMTECH CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCLOR IN SOIL ANALYSIS
µg/Kg

		SAMPLE NUMBER	A4B24	A4B25	A4B26	A4B27	A4B28	A4B29	A4B33
		SAMPLE LOCATION	SO-07	SO-14	SO-200	SO-21	SO-22	SO-23	SO-62
		STATION LOCATION	JCS-008	JCS-015	JCS-475	JCS-024	JCS-025	JCS-026	JCS-076
		LABORATORY NUMBER	E1902-01	E1902-02	E1902-03	E1902-04	E1902-05	E1902-06	E1902-09
COMPOUND	MDL	CRQL							
Aroclor-1016	2.6	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
Aroclor-1221	7.8	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
Aroclor-1232	1.3	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
Aroclor-1242	6.2	33	41 U	120	130	110 J	140	36 U	180
Aroclor-1248	2.7	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
Aroclor-1254	3.2	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
Aroclor-1260	3.2	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
Aroclor-1262	14	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
Aroclor-1268	6.6	33	41 U	37 U	37 U	36 U	36 U	36 U	38 U
		DILUTION FACTOR	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		DATE SAMPLED	4/3/2013	4/3/2013	4/3/2013	4/3/2013	4/3/2013	4/3/2013	4/4/2013
		DATE EXTRACTED	4/19/2013	4/19/2013	4/19/2013	4/19/2013	4/19/2013	4/19/2013	4/19/2013
		DATE ANALYZED	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/25/2013
		SAMPLE WEIGHT (GRAMS)	30	30.1	30.0	30.0	30.0	30.0	30.1
		% SOLID	80.4	88.8	88.4	90.8	91.0	90.6	85.6

NOTES: µg/Kg = micrograms per Kilogram
All results are reported on a Dry Weight Basis.
MDL = Method Detection Limit
CRQL = Contract Required Quantitation Limit
U = Value is Non-Detected.
UJ = Value is Non-Detected, and Detection Limit is Estimated.
J = Value is Estimated.
R = Value is Rejected.
* = Reported value is from diluted analysis.

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4B24
LABORATORY: CHEMTECH
CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCLOR IN SOIL ANALYSIS
µg/Kg

		SAMPLE NUMBER	A4B35	A4B17	A4B18	A4B19	A4B20	A4B21	A4B22
		SAMPLE LOCATION	SO-65	SB-01	SB-03	SB-05	SB-06	SB-08	SB-09
		STATION LOCATION	JCS-086	JCS-130	JCS-136	JCS-138	JCS-148	JCS-153	JCS-143
		LABORATORY NUMBER	E1902-10	E1902-13	E1902-14	E1902-15	E1902-16	E1902-17	E1902-18
COMPOUND	MDL	CRQL							
Aroclor-1016	2.6	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
Aroclor-1221	7.8	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
Aroclor-1232	1.3	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
Aroclor-1242	6.2	33	38 U	280000 *	4800000 *	820 *	1900 *	730000 *	40000 *
Aroclor-1248	2.7	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
Aroclor-1254	3.2	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
Aroclor-1260	3.2	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
Aroclor-1262	14	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
Aroclor-1268	6.6	33	38 U	3900 U	3500 U	37 U	36 U	3600 U	36 U
		DILUTION FACTOR	1.0	100 / 1000*	100 / 2000*	1 / 2*	1 / 10*	100 / 2000*	1 / 100*
		DATE SAMPLED	4/5/2013	4/1/2013	4/1/2013	4/8/2013	4/8/2013	4/8/2013	4/8/2013
		DATE EXTRACTED	4/19/2013	4/19/2013	4/19/2013	4/19/2013	4/19/2013	4/19/2013	4/19/2013
		DATE ANALYZED	4/25/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013
		SAMPLE WEIGHT (GRAMS)	30	30	30	30.1	30.1	30.1	30.1
		% SOLID	85.7	84.1	93.5	90.2	90.7	91.0	92.4

NOTES: µg/Kg = micrograms per Kilogram
All results are reported on a Dry Weight Basis.
MDL = Method Detection Limit
CRQL = Contract Required Quantitation Limit
U = Value is Non-Detected.
UJ = Value is Non-Detected, and Detection Limit is Estimated.
J = Value is Estimated.
R = Value is Rejected.
* = Reported value is from diluted analysis.

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4B24
LABORATORY: CHEMTECH CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCLOR IN SOIL ANALYSIS
µg/Kg

		SAMPLE NUMBER	A4B23	A4B30	A4B31	A4B32	A4B34		
		SAMPLE LOCATION	SO-06	SO-34	SO-36	SO-46	SO-64		
		STATION LOCATION	JCS-006	JCS-046	JCS-048	JCS-061	JCS-183		
		LABORATORY NUMBER	E1902-19	E1902-20	E1902-21	E1902-22	E1902-23		
COMPOUND	MDL	CRQL							
Aroclor-1016	2.6	33	39 U	37 U	39 U	38 U	38 U		
Aroclor-1221	7.8	33	39 U	37 U	39 U	38 U	38 U		
Aroclor-1232	1.3	33	39 U	37 U	39 U	38 U	38 U		
Aroclor-1242	6.2	33	150 J	320	1600 *	1200 *	280 J		
Aroclor-1248	2.7	33	39 U	37 U	39 U	38 U	38 U		
Aroclor-1254	3.2	33	39 U	37 U	39 U	38 U	38 U		
Aroclor-1260	3.2	33	39 U	37 U	39 U	38 U	38 U		
Aroclor-1262	14	33	39 U	37 U	39 U	38 U	38 U		
Aroclor-1268	6.6	33	39 U	37 U	39 U	38 U	38 U		
		DILUTION FACTOR	1.0	1.0	1 / 10*	1 / 10*	1.0		
		DATE SAMPLED	4/3/2013	4/4/2013	4/4/2013	4/4/2013	4/4/2013		
		DATE EXTRACTED	4/19/2013	4/19/2013	4/19/2013	4/19/2013	4/22/2013		
		DATE ANALYZED	4/25/2013	4/25/2013	4/26/2013	4/26/2013	4/25/2013		
		SAMPLE WEIGHT (GRAMS)	30	30	30	30	30.1		
		% SOLID	85.3	88.6	84.9	88.8	85.6		

NOTES: µg/Kg = micrograms per Kilogram
All results are reported on a Dry Weight Basis.
MDL = Method Detection Limit
CRQL = Contract Required Quantitation Limit
U = Value is Non-Detected.
UJ = Value is Non-Detected, and Detection Limit is Estimated.
J = Value is Estimated.
R = Value is Rejected.
* = Reported value is from diluted analysis.

REGION I, EPA-NE ORGANIC REGIONAL DATA ASSESSMENT (ORDA)*

Case No.: 43392 | Site Name: Jard Company INC

SDG No.: AYB24 | No. of Samples/Matrix: 19/Soil

Lab Name: Chemtech Consulting Group | Validation Contract: WESTON

SOW#/Contract#: SOM01.2 | Validator's Name: Bill Mahany

EPA-NE DV Tier Level: Tier II | Date DP Rec'd by EPA-NE:

TPO/PO: **ACTION ____ FYI ✓ | DV Completion Date: 5/30/13

ANALYTICAL DATA QUALITY SUMMARY

	VOC	SVOC	PEST	ARO
1. Preservation and Contractual Holding Times:	NA	NA	NA	o
2. GC/MS / GC/ECD Instrument Performance Check:				o
3. Initial Calibration:				o
4. Continuing Calibration:				o
5. Blanks:				o
6. DMCs or Surrogate Compounds:				o
7. Internal Standards:			NA	NA
8. Matrix Spike/Matrix Spike Duplicate:				o
9. Sensitivity Check:				o
10. PE samples - Accuracy Check:				o
11. Target Compound Identification:	NA	NA		o
12. Compound Quantitation and Reported QLs:				o
13. Tentatively Identified Compounds:			NA	NA
14. Semivolatile Cleanup/Pesticide/PCB Cleanup:	NA			o
15. Data Completeness:				o
16. Overall Evaluation of Data:				o

o = Data had no problems or were qualified due to minor contractual problems.
m = Data were qualified due to major contractual problems.
z = Data were rejected as unusable due to major contractual problems.

Action Items (z items):

Areas of Concern (m items):

Comments:

*This form assesses the analytical data quality in items of contractual compliance only. It does not assess sampling errors and/or non-contractual analytical issues that affect data quality.

** Check "ACTION" only if contractual defects resulted in reduced payment/data rejection recommendations.

Validator: Bill Mahany | Date: 5/30/13

EPA - NE
Data Validation Worksheet Cover Page - Page 1

Site Name: Jard Company Inc
TDD No.: 12-10-0008
Task No.: 0850

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name: ChemTech Consulting Group
Case No.: 43392
SDG No.: AYB24
No. of Samples/Matrix:

SOW #/Contract #: SOM01.2
Sampling Dates: 4/1, 3, 4, 5, 8, 17
Shipping Dates: 4/17-18/13
Date Rec'd by Lab: 4/18-19/13

Traffic Report Sample Nos: AYB24-B29, B33, B35, AYB17 → B23, B30-32, B34

Trip Blank No.: —
Equipment Blank No: AYB05, B06, B08, B09, B10
Field Duplicate Nos: AYB25/B26
PE Nos: AYB56/B57

The Region I, EPA - NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision 12/96 was used to evaluate the data and/or approved modifications to the EPA - NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attached modified criteria from EPA approved QAPjP or amendment to the QAPjP).

A Tier II or a Tier III evaluation was used to validate the data. If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation:

The data were evaluated based upon the following parameters:

- Overall Evaluation of Data
- Data Completeness (CSF Audit - Tier I)
- Preservation and Technical Holding Times
- GC/MS and GC/ECD Instrument Performance Check
- Initial and Continuing Calibrations
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates
- Sensitivity Check
- PE Samples/Accuracy Check
- Target Compound Identification
- Compound Quantitation and Reported Quantitation Limits
- TICs
- Semivolatile and Pesticide/PCB Cleanup
- System Performance

Region I Definitions and Qualfiers:

A - Acceptable Data
J - Numerical value associated with compound is an estimated quantity.
R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.
U - Compound not detected at that numerical sample quantitation limit.
UJ - The sample quantitation limit is an estimated quantity.
TB, EB - Compound detected in aqueous trip blank or aqueous equipment blank associated with soil/sediment samples.

Validator's Name: Bill Mahany Company Name: WESTON Phone Number: 978-552-2100

Date Validation Started: 5/28/13 Date Validation Completed: 5/30/13

EPA - NE
Data Validation Worksheet Cover Page - Page 2

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: There is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV Worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	NA
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	@
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	
VOA/SV-III	INITIAL CALIBRATION	
VOA/SV-IV	CONTINUING CALIBRATION	
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	
SV-VI	SV SURROGATE SPIKE RECOVERIES	
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	NA
VOA/SV-Pest/PCB-XI	ACCURACY CHECK/ PE SCORE SHEETS	@
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	NA
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	
VOA/SV-XV	SEMIVOLATILE CLEANUP	
TABLE II - WORKSHEET	OVERALL EVALUATION OF DATA	*

Pest/ARO Worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	@
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	@
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	✓
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	✓
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	✓
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	✓
Pest/PCB-III	INITIAL CALIBRATION	✓
Pest/PCB-IV	CONTINUING CALIBRATION	✓
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	✓
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	✓
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	
Pest/PCB-VII	PESTICIDE CLEANUP	✓
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	✓
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	✓
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	NA
VOA/SV-Pest/PCB-XI	ACCURACY CHECK/ PE SCORE SHEETS	@
Pest/PCB-XII	COMPOUND IDENTIFICATION	
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	
TABLE II - WORKSHEET	OVERALL EVALUATION OF DATA	*

@ - always included
* - See DV Memo

I certify that all criteria were met for the worksheets checked above.

Signature: _____ Name: Bill Mahany

Date: 5/13

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: Aroclor only

Missing Information	Date Lab Contacted	Date Received

Validator: MAHANY Date: 5/22/13

EPA-NE - Data Validation Worksheet
VOA/SV - **Pest/ARO** - 2

Sampler: G. Hamm Company: WESTON Contacted: Yes (No) Date: _____

1. PRESERVATION AND HOLDING TIMES

Cooler Temp: 5°, 6°, 6°, 6° Documented: Page: 487-90

Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days"/(*Extraction Code).

				PEST						ARO					
Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	Date Extracted	# of Days from Samp. to Ext.	*Ext. Code	Date Analyzed	# of Days from Ext. to Anal.	Action	Date Extracted	# of Days from Samp. to Ext.	*Ext. Code	Date Analyzed	# of Days from Ext. to Anal.	Action
AYB24	Soil	1	4/3/13							4/19/13	16	SOX	4/25/13	6	A*
B25															
B26															
B27															
B28															
B29															
B33			4/4/13								15				
B35			4/5/13								14				
B36	PE		4/17/13				NA				2				
B37											2		4/26/13	7	
AYB17	Soil		4/1/13								18		4/26/13		*
B18															*
B19			4/8/13								11				
B20															
B21														7	
B22										4/22/13					
B23			4/3/13							4/19/13	16		4/25/13	6	*
B30			4/4/13								15				
B31													4/26/13	7	
B32															
B34													4/25/13	6	

Preservation Code:
1. Cool @ 4°C (± 2°C)
2. Preserve with HCl to ≤ pH 2.
3. Protect from light.
4. Freeze.
5. Room temperature (avoid excessive heat).
6. Encore sampler (48 hour hold time).

***Extraction Code:**
L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:
J - Estimate (J) detected values.
UJ - Estimate (UJ) non-detected values.
R - Reject (R) non-detected values.

A* = 1-yr holding time per EPA QA chemist discussion and SW-846/CBCL&A reference

Matrix Codes:
AQ - Aqueous
S/S - Soil/Sediment
AQ FB - Aqueous Field Blank

Validator: Mahany Date: 5/28/13

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/ARO - V

V. Rinsate Blank Tabulation - list the applicable rinsate (equipment) blanks below:

Rinsate Blank No.	Sample No.	Equipment Rinsed to Generate the RB	Matrix Applies to:
RB- 01	AY B02	GeoProbe	Soil
RB- 02	B05	Hand Auger	↓
RB- 03	B06	↓	↓
RB- 05	B08	↓	↓
RB- 07	B16	GeoProbe	↓
RB-			

Matrix Codes: SS - surface soil
SD - sediment
SO - source soil
SB - soil boring
GW - groundwater
DW - drinking water
SW - surface water

Note: Apply each RB only to the matrix to which it corresponds. For example, apply the hand auger RB to the soil samples, but not to the surface water samples.

If more than one hand auger/soil sample RB was collected, the RBs may be batched and the highest hit from the batch used to determine the action levels. However, if one RB exhibits an unusual amount of contamination, apply this RB to only the associated samples. Do not batch this RB and apply to all samples of the same matrix.

Validator: Mchany

Date: 5/29/13

EPA - NE - Data Validation Worksheet
VOA/SV - Pest/PCB -XI

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No.: AY8Y **Case:** 43392

Are more than one-half the PE analytes within criteria for each parameter? (Yes) No

Always submit this sheet and attach PE score sheets

PE Sample No.	Ampule No.	Parameter	Type of PE	Matrix	Analyte	Conc.	Region I EPA PE Scores*	Samples Affected	Action
AY856	AS X084	SO/1660	single blind	SO	Aroclor	UM	PASS	None	None
857	AS1507	↓	↓	↓	1260	↓	↓		

*For Region I PE indicate the Region I PE Score report result: Action High, Acion Low, TCL Miss, or TCL Contaminant.

Validator: Mahany Date: 5/30/13

PES SCORING EVALUATION REPORT

Lab Name: Chemtech Consulting Group
Contract: EPW11030
SDG No.: A4B24
Lab File ID: PB004938.D
Date Analyzed: 04/25/2013
Decanted: No
Injection Vol. (uL): 1.0
Sulfur Cleanup: No

Case No.: 43392
Matrix: Soil
Date Received: 04/18/2013
Sample Wt./Vol. (g/mL): 30.0 g
Extraction Type: SOXH
GPC Cleanup: No
Dilution Factor: 1.0

Lab Code: CHEM
SAS/Client No.: NA
Lab Sample ID: E1902-11
Date Extracted: 04/19/2013
% Moisture: 0.0
Conc. Extract Vol. (uL): 10000
pH: NA
Units: ug/Kg

Analysis Method: SOM01.2
Scoring Method: SOM01.2
Comments:

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
53469-21-9	Aroclor-1242	870	D	PASS	Within Limits
****	END Main Analytes	**********	****	****	**********
****	END All Analytes	**********	****	****	**********

PES SCORING EVALUATION REPORT

Lab Name: Chemtech Consulting Group
Contract: EPW11030
SDG No.: A4B24
Lab File ID: PB004940.D
Date Analyzed: 04/26/2013
Decanted: No
Injection Vol. (uL): 1.0
Sulfur Cleanup: No

Case No.: 43392
Matrix: Soil
Date Received: 04/18/2013
Sample Wt./Vol. (g/mL): 30.1 g
Extraction Type: SOXH
GPC Cleanup: No
Dilution Factor: 1.0

Lab Code: CHEM
SAS/Client No.: NA
Lab Sample ID: E1902-12
Date Extracted: 04/19/2013
% Moisture: 0.0
Conc. Extract Vol. (uL): 10000
pH: NA
Units: ug/Kg

Analysis Method: SOM01.2
Scoring Method: SOM01.2
Comments:

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
11096-82-5	Aroclor-1260	830	D	PASS	Within Limits
****	END Main Analytes	**********	****	****	**********
****	END All Analytes	**********	****	****	**********

EPA - NE - Data Validation Worksheet
VOA/SV - Pest/PCB - XIII

XIII. SAMPLE QUANTITATION

If no PE, do sample calculation.

Recalculate, from the raw data, the concentration for one positive detect and one reported sample quantitation limit (SQL) for a non-detect in a diluted sample or soil sample per fraction. (Note: Although Section XIII, C 2. a. requires that one calculation for each fraction in each sample be performed, the validator is only required to reproduce an example, for each fraction, of one positive detect and one SQL calculation on this worksheet.)

Fraction		Calculation*	
VOC		Detect:	Non-detect QL:
Sample No.:			
Reported Compound:			
Reported Value:			
Non-detected Compound:			
Reported Quantitation Limit:			
SVOC		Detect:	Non-detect QL:
Sample No.:			
Reported Compound:			
Reported Value:			
Non-detected Compound:			
Reported Quantitation Limit:			
P/PCB		Detect: $\frac{(A_x)(V_t)(DF)(GPC)}{(CF)(V_i)(W_s)(D)}$ (dwt)	Non-detect QL: $33 \times \frac{30}{30.1} \times \frac{1}{.888} = 37.038 = 37 > U$
Sample No.: A4825			
Reported Compound: Aroclor 1242			
Reported Value:	120		
Non-detected Compound:	Aroclor 1254		
Reported Quantitation Limit:	37 U		

Vt = 10 mL; DF = 1; GPC = 1; Vi = 1; Ws = 30.1; D = $\frac{100 - 11.2}{100} = 0.888$

* - NA for Tier II if PE score is OK.

Do all soil/sediment samples have % solids greater than 30%? Y N If solids <30%, have sample volumes been increased sufficiently to compensate? Y N
If no. list sample numbers_____

Validator: MARY ANN Date: 5/30/13

Δx	cf	g
48395	~~25244750~~	783844
581549	~~1822048~~	1747423
132832	~~673310~~	644519
737521	~~1651330~~	1125786

$$\frac{(48395)(10000)(1)(1)}{(\sout{25244750}\ 783844)(1)(30.1)(.888)} = \sout{.7172}\ 23.1$$

581549

$$\frac{(581549)(10000)(1)(1)}{(1747423)(1)(30.1)(.888)} = 124.5$$

$$\frac{132832 \times 10000}{644519 \times 26.7288} = 77.1$$

$$\frac{737521 \times 10000}{1125786 \times 26.7288} = 245.1 \checkmark \quad \sout{24.51}$$

Avg = 117.5 = **120**

All Criteria Met _____

VI. SURROGATE SPIKE RECOVERIES - PESTICIDES/PCBS

List the percent recoveries which do not meet the method QC acceptance criteria.

Sample No.	TCX		DCB		Action	
	Column 1	Column 2	Column 1	Column 2	Detects	Non-detects
A4B17	5978	475	276	269	J A	A
B18	19413	530	228	217	↓ R	↓
B21	13123	1162	866	868	↓ A	↓
B22	248	88	75	85	A	A
A4B17DL	0	0	0	0	A	A
A4B18DL	0	0	0	0	↓	↓
A4B21DL	0	0	0	0	↓	↓

100X then 1000-2048 #1
-#2

TCX - Tetrachloro-m-xylene DCB - Decachlorobiphenyl

QC Limits:	30-150	30-150

Qualification of data:

1. No action is taken when a sample is analyzed at a dilution.
2. No action is required when only one of the four surrogates is outside the QC acceptance criteria and the recovery is > 10%.
1. Estimate (J, UJ) all positive and non-detected results if any two surrogates are < the QC acceptance criteria.
2. Estimate (J) all positive results if any two surrogates are > the QC acceptance criteria.
3. Reject (R) all non-detected results and estimate (J) all positive results if any one surrogate is < 10%.

Sample Results	One or more surrogates < 10%	Two or more surrogates 10% ≤ %R < LL	All surrogates LL ≤ %R ≤ UL	Two or more surrogates > UL
Detects	J	J	A	J
Non-detects	R	UJ	A	A

LL - Lower Limit UL - Upper Limit

Validator: MAHANY Date: 5/30/13

EPA - NE - Data Validation Worksheets
Form 10

All Criteria Met _____

Case: 43392
SDG: A4824

Site Name: JARD Company Inc
Page 1 of 1

Sample No.	Compound	Column I	Column II	%D	Action	Comments
A4827	AR1242	110	190	72.7	J	
A4823	AR1242	150	190	26.7	J	
A4834	AR1242	410	280	46.4	J	

Use Comments section to list compounds that went to "U" due to Blank Contamination Actions or Co-elution with Aroclors.

Actions:

J - Estimate results when %D > 25% but ≤100% for pesticides or %D >25% but ≤500% for PCBs.
J@ - %D >25% but ≤100% for pesticides or %D > 25% but ≤500% for PCBs. Previously qualified as estimated by laboratory due to quantitation below the quantitation limit. No further qualification is needed.
R - Reject results when %D >100 for pesticides or %D >500% for PCBs.
U - Qualify result as undetected at the CRQL when %D >100% for pesticides or %D >500% for PCBs and both results are < the CRQL.
U* - Report the non-detected result from the diluted analysis.
U^ - Compound not confirmed by GC/MS. Raise detection limit to reported concentration.
DL - Report the result from the diluted analysis.

Validator: MAHANY

Date: 5/30/13

107, MW-2, MW-3, MW-3D, MW-6, MW-6D, MW-9D, and MW-11. Based on the above information, START personnel planned to purge/develop monitoring wells MW-2, MW-3, MW-3D, MW-6, and MW-6D on 28 March 2013.

1630 hrs: START personnel marked properties located along Park Street and Bowen Road for Dig Safe notification. Following dig safe marking; START personnel secured and departed the site.

28 March 2013 (Thursday) – Site Reconnaissance, Well Development

Weather: Cloudy, high 30 to low 40 °F

0700 hrs: START members Kelly, Hornok, Bitzas, and Robinson arrived at the Jard property. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O_2, H_2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.

0715 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, potential weather issues), chemical hazards [PCBs, non-aqueous phase liquids (NAPL) containing water], Radiation (Not encountered previously) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed.

0800 hrs: START personnel began purging/developing the selected ground water monitoring wells using a Wattera inertia pump system with dedicated tubing, check valve, and surge block at each well. START personnel established on site investigative derived waste (IDW) staging area along west side of Source Pile, on asphalt pavement area/driveway. Location will allow truck for IDW pickup to enter and exit site easily. Staging area consists of 55-gallon drums placed on wooden pallets.

0900 hrs: START PL. Kelly discussed with CORs Bosworth and Smith regarding status of the monitoring well examination, and selection of wells to be purged and sampled. CORs agreed with selection of wells to be sampled.

START personnel continued well purging operations. For the monitoring wells selected for redevelopment/purging, the purge volume in approximate (~) gallons is listed for each well. The following ~ volumes of ground water and/or material were purged from the groundwater wells listed above: MW-2: ~10 gallons; MW-3: ~10 gallons; MW-3D: ~20 gallons; MW-6: ~5 gallons; and MW-6D: ~ 30 gallons. Approximately 4.5 feet of silt material was removed from ground water monitoring well MW-6D. In addition, a very thin NAPL with a greasy feel, along with black oil-like droplets, and a rainbow sheen were observed in IDW purge water removed from MW-3, MW-3D, and MW-6D.

1330 hrs: START personnel secured the groundwater monitoring well IDW purge water drums, secured the site and departed the Jard property.

1 April 2013 (Monday) – Soil/Source Sampling

Weather: Cloudy, some rain, 45 to 50 °F

1045 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property.

1100 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, Geoprobe Work concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed

the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O_2, H_2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm. START Team established decontamination area.

1115 hrs: START personnel began decontaminating non-dedicated field sampling equipment including Geoprobe macrocores and cutting shoes, hand augers, metal scoops, and low-flow bladder pumps. Non-dedicated equipment (Geoprobe equipment, augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

1400 hrs: Began soil boing activities with the Geoprobe at soil boring location SB-01 located on the south-central area of the former building footprint in an area previously excavated during an EPA Removal action. An EPA removal action was completed at the site during 2007 where the building was razed, a portion of the concrete foundation was removed, and a permeable earthen cap was installed to limit exposure to contaminated soils. Boring activities as part of the Site Reassessment were targeted at the area of the foundation removal and soil excavation (southern portion of the former building footprint).

Sampling on the Jard property and surrounding properties for solid matrices (soil/source, surface soil, and sediment) will be conducted as follows, unless otherwise noted: locations will be designated prior to initiation of sampling activities; at each location, sampling depth will be determined based on sampling objectives and/or materials encountered; for each sampled depth interval at each location, material will be placed in a large polyethylene bag (12 by 15 inches); the material will then be homogenized completely in the bag; the material will later be described by a licensed professional geologist using the modified Burmiester soil classification system and a small sample aliquot will be collected for PCB field screening analysis performed by the US EPA Mobile Laboratory personnel; based on field screening results and sampling objectives, a subset of samples will be selected for further analysis via Contract Laboratory Program (CLP) Aroclor analysis; samples selected for CLP analysis will be aliquoted with sufficient quality assurance/quality control (QA/QC) volume; all solid matrix samples submitted for CLP Aroclor analysis will also be aliquoted for potential congener analysis, unless otherwise noted; following receipt of CLP Aroclor analytical results, a smaller subset of samples will then be selected and submitted for congener analysis. A separate field data sheet will be completed by the field sampler for each sample collected to document relevant information and to supplement field logbook notes.

Additional START personnel performed bump checks on calibrated YSI 550 pH/oxidation reduction potential (ORP)/Conductivity probes for ground water sampling scheduled to be completed on 2 April 2013. All the calibrated ground water sampling equipment was working properly (See calibration log sheets).

1415 hrs: Soil/source sample SB-01A (Sample #: JCS-128) was collected using a Geoprobe macrocore from a depth of 2.7 to 4 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

1420 hrs: Soil/source sample SB-01B (Sample #: JCS-129) was collected using a Geoprobe macrocore from a depth of 6.9 to 8 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

1430 hrs: Soil/source sample SB-01C (Sample #: JCS-130) was collected using a Geoprobe macrocore from a depth of 10.4 to 12 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

1440 hrs: Soil/source sample SB-01D (Sample #: JCS-131) was collected using a Geoprobe macrocore from a depth of 12 to 14 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

1500 hrs: START personnel completed soil boing activities at location SB-01. Soil boring SB-01 was completed to a depth of 14 feet bgs due to refusal. See the soil Boring Logs for complete descriptions of the boring completed. The soil boring was backfilled with sand and bentonite. START personnel relocated to and began boring activities at soil boring location SB-02 located on the south-central area of the former building footprint in an area previously excavated during an EPA Removal action.

1520 hrs: Soil/source sample SB-02A (Sample #: JCS-132) was collected using a Geoprobe macrocore from a depth of 2.2 to 4 feet bgs from soil boring SB-02 and later submitted for PCB field screening analysis.

1530 hrs: Soil/source sample SB-02B (Sample #: JCS-133) was collected using a Geoprobe macrocore from a depth of 6.9 to 8 feet bgs from soil boring SB-02 and later submitted for PCB field screening analysis.

1540 hrs: Soil/source sample SB-02C (Sample #: JCS-134) was collected using a Geoprobe macrocore from a depth of 8.8 to 10 feet bgs from soil boring SB-02 and later submitted for PCB field screening analysis.

1545 hrs: START personnel completed soil boing activities at location SB-02. Soil boring SB-02 was completed to a depth of 10 feet bgs due to refusal. Evidence (piece of) the orange snow fence layer installed as part of the earthen cap construction was encountered at 2.5 feet bgs. See the soil Boring Logs for complete descriptions of the boring completed. The soil boring was backfilled with sand and bentonite. START personnel relocated to and began boring activities at soil boring location SB-03, located on the south-central capped area, adjacent to ground water monitoring wells MW-3 and MW-3D.

1555 hrs: Soil/source sample SB-03A (Sample #: JCS-135) was collected using a Geoprobe macrocore from a depth of 0.7 to 2.6 feet bgs from soil boring SB-03 and later submitted for PCB field screening analysis.

1605 hrs: Soil/source sample SB-03B (Sample #: JCS-136) was collected using a Geoprobe macrocore from a depth of 4.8 to 6.5 feet bgs from soil boring SB-03 and later submitted for PCB field screening analysis.

1610 hrs: START personnel completed soil boing activities at location SB-03. Soil boring SB-03 was completed to a depth of 6.5 feet bgs due to refusal. The soil boring was backfilled with sand and bentonite. START personnel completed soil boring activities for the day.

1630 hrs: Equipment rinsate blank sample RB-01 (Sample #: JCW-013; CLP #: A4B02) was collected from the Geoprobe macrocore system sampling equipment and is associated with soil/source sampling activities conducted on 1 April 2013.

1700 hrs: START personnel secured the site and departed the Jard property.

2 April 2013 (Tuesday) – Ground Water Sampling

Weather: Cloudy, little precipitation, low 30 °F

0700 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Saylor arrived at the Jard property.

0715 hrs: START HSC Kelly HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, potential weather issues), chemical hazards [PCBs, non-aqueous phase liquids (NAPL) containing water], Radiation (Not encountered previously) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O_2, H_2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm. Note that the ground

water monitoring equipment was calibrated on 1 April 2013 and bump-tested on 2 April 2013, and determined to be with calibration specifications (see calibration sheets).
START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (bladder pumps, measuring tapes, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

0830 hrs: START member Bitzas began monitoring of low-flow parameters at ground water monitoring well EPA-104D located in the wetland area, west of Park Street and downgradient from the Jard property, behind the residential properties. START member Bitzas monitored low-flow ground water parameters per the Site-Specific Quality Assurance project Plan (QAPP) and START standard operating procedures (SOPs). See the field data sheets for more information.

0905 hrs: START member Saylor began monitoring of low-flow parameters at ground water monitoring well MW-11 located northwest of the Jard property. START member Saylor monitored low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.

0920 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-10 [Matrix Spike/Matrix Spike Duplicate (MS/MSD)] (Sample #: JCW-010; CLP #: A4A99) was collected from monitoring well EPA-104D. Ground water sample GW-10 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 3.74 degrees Celsius (°C); Specific Conductivity = 91 micro Siemens per centimeter (µS/cm); pH = 5.72; ORP = 229.3 millivolts (mv); Dissolved Oxygen (DO) = 9.11 milligrams per liter (mg/L); and turbidity = 21.2 Nephelometric Turbidity Units (NTU). Note: Due to a YSI 550 probe malfunction, an additional volume of sample was collected for pH and ORP measurements using a second YSI 550. In addition, pH was monitored during low-flow activities with pH paper. Readings on pH paper indicated a pH between 5.0 and 6.0. A total of approximately 13.5 liters was purged prior to sample collection with the pump intake at 20.0 ft below the TOC. See the field data sheets for more information.

0940 hrs: START member Imbres began monitoring of low-flow parameters at ground water monitoring well EPA-107 located northwest of the Jard property. START member Imbres monitored low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.

1000 hrs: START member Robinson began monitoring of low-flow parameters at ground water monitoring well MW-9D located west of the Jard property. START member Robinson monitored low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.

1030 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-02 (Sample #: JCW-002; CLP #: A4A91) was collected from monitoring well EPA-107. Ground water sample GW-02 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 5.14 °C; Specific Conductivity = 162 µS/cm; pH = 7.12; ORP = 192.9 mv; DO = 4.40 mg/L; and turbidity = 0.51 NTU. A total of approximately 11.0 liters was purged prior to sample collection with the pump intake at 17 ft. below the TOC.

1110 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-09 (Sample #: JCW-009; CLP #: A4A98) was collected from monitoring well MW-11. Ground water sample GW-09 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 3.42 °C; Specific Conductivity = 55 µS/cm; pH = 6.34; ORP = 138.6 mv; DO = 11.41 mg/L; and turbidity = 10.3 NTU. A total of approximately 61.7 liters was purged prior to sample collection with the pump intake at 6.5 ft. below the TOC. The turbidity meter initially used to evaluate low-flow ground water parameters compliance malfunctioned and was replaced with one that was operational.

1125 hrs: Stabilization of water quality parameters was achieved and groundwater sample GW-08 (Sample #: JCW-008; CLP #: A4A97) and field duplicate GW-11 (Sample #: JCW-011; CLP #: A4B00) were collected from monitoring well MW-9D located west of the Jard property. Ground water samples GW-08 and GW-11 were collected using a bladder pump and the final water quality parameters were as follows: Temperature = 6.52 °C; Specific Conductivity = 44 µS/cm; pH = 6.29; ORP = 25.2 mv; DO = 0.13 mg/L; and turbidity = 34.2 NTU. A total of approximately 17 liters was purged prior to sample collection with the pump intake at 24 ft below the TOC. An issue was encountered with the turbidity meter during low-flow ground water monitoring, and was replaced with one that was operating.

1200 hrs: pH and ORP measurements were collected from a volume of water from ground water sample GW-10 and were as follows: pH = 5.72; ORP = 229.3 mv.

1250 hrs: START member Imbres began monitoring of low-flow parameters at ground water monitoring well EPA-100 located north of the Jard property. START member Imbres monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.

1310 hrs: START member Bitzas began monitoring of low-flow parameters at ground water monitoring well MW-2 located on the southern portion of the Jard property. START member Bitzas monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.

1345 hrs: START member Saylor began monitoring of low-flow parameters at ground water monitoring well MW-3D located directly south of the former building footprint on the southern portion of the Jard property. START member Saylor monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.

1355 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-01 (Sample #: JCW-001; CLP #: A4A90) was collected from monitoring well EPA-100. Ground water sample GW-01 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 4.03 °C; Specific Conductivity = 119 µS/cm; pH = 6.61; ORP = 266.3 mv; DO = 11.74 mg/L; and turbidity = 1.78 NTU. A total of approximately 13.8 liters was purged prior to sample collection with the pump intake at 32 ft below the TOC.

1345 hrs: START member Robinson began monitoring of low-flow parameters at ground water monitoring well MW-6D located directly west of the former building footprint on the western boundary of the Jard property. START member Robinson monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.

1405 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-03 (Sample #: JCW-003; CLP #: A4A92) was collected from monitoring well MW-02. Ground water sample GW-03 was collected using a peristaltic pump with dedicated tubing and the final water quality parameters were as follows: Temperature = 1.41 °C; Specific Conductivity = 79 µS/cm; pH = 5.59; ORP = 175.3 mv; DO = 11.41 mg/L; and turbidity = 0.91 NTU. A total of approximately 11 liters was purged prior to sample collection with the intake at 8.6 ft below the TOC.

1505 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-05 (Sample #: JCW-005; CLP #: A4A94) was collected from monitoring well MW-3D. Ground water sample GW-05 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 1.90 °C; Specific Conductivity = 47 µS/cm; pH = 6.37; ORP = 112.7 mv; DO = 4.75 mg/L; and turbidity = 1.16 NTU. A total of approximately 13.6 liters was purged prior to sample collection with the pump intake at 29 ft below the TOC. In addition, stabilization of water quality parameters was achieved and ground water sample GW-07 (Sample #: JCW-007; CLP # A4A96) was collected from monitoring well MW-6D.

Ground water sample GW-07 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 7.17 °C; Specific Conductivity = 42 µS/cm; pH = 6.53; ORP = 203.9 mv; DO = 8.80 mg/L; and turbidity = 51.7 NTU. A total of approximately 16.7 liters was purged prior to sample collection with the pump intake at 26.5 ft below the TOC.

1545 hrs: START member Robinson began monitoring of low-flow parameters at ground water monitoring well MW-6 located directly west of the former building footprint on the western boundary of the Jard property. START member Robinson monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information. The YSI initially used to monitor low-flow ground water parameters was replaced with one that was operational.

1555 hrs: START member Saylor began monitoring of low-flow parameters at ground water monitoring well MW-3 located directly south of the former building footprint on the southern portion of the Jard property. START member Saylor monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information. Low-flow ground water parameters were not conducted within a flow cell due to potential contamination/non-aqueous phase liquid (NAPL) within the well. Previous purging of the well on 28 March 2013 indicated product within the well that had a greasy feel and contained small oil droplets that were black in color.

1600 hrs: Equipment rinsate blank sample RB-20 (Sample #: JCW-012; CLP #: A4B01) was collected from a bladder pump sampling equipment and is associated with ground water sampling activities.

1630 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-06 (Sample #: JCW-006; CLP #: A4A95) was collected from monitoring well MW-6. Ground water sample GW-06 was collected using a peristaltic pump with dedicated tubing and the final water quality parameters were as follows: Temperature = 4.18 °C; Specific Conductivity = 116 µS/cm; pH = 6.35; ORP = -83.6 mv; DO = 0.20 mg/L; and turbidity = 0.72 NTU. A total of approximately 9 liters was purged prior to sample collection with the intake at 13.5 ft below the TOC.

1700 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-04 (Sample #: JCW-004; A4A93) was collected from monitoring well MW-3. Ground water sample GW-04 was collected using a peristaltic pump with dedicated tubing and the final water quality parameters were as follows: Temperature = 1.25 °C; Specific Conductivity = 69 µS/cm; pH = 6.67; ORP = -158.2 mv; DO = 4.40 mg/L; and turbidity = 0.93 NTU. A total of approximately 15 liters was purged prior to sample collection with the intake at 10.5 ft below the TOC. Ground water sample GW-04 was also collected for congener analysis.

1730 hrs: IDW purge water was containerized in 55-gallon steel drums and segregated based on well location (on or off the Jard property). Segregation is to aid in later IDW disposal, assuming wells from on the Jard property contain high concentrations of contaminants than those wells located off the Jard property. In addition, waste soil material and IDW Decon waste are also segregated to aid in later IDW disposal activities. START personnel secured IDW drums, secured the site and departed the Jard property.

3 April 2013 (Wednesday) – Soil/Source Sampling

Weather: Partly cloudy, high 30 °F

0700 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property. In addition, performance evaluation samples PE-AA3325 (Sample #: JCW-014;

CLP #: A4B03) and PE-AA2555 (Sample #: JCW-015; CLP#: A4B04) were collected for CLP Aroclor analysis.

0715 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, snakes, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O_2, H_2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.
START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

0815 hrs: Soil/source sample SO-01A (Sample #: JCS-001) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0820 hrs: Soil/source sample SO-02A (Sample #: JCS-002) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0830 hrs: Soil/source sample SO-03A (Sample #: JCS-003) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-04A (Sample #: JCS-004) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0840 hrs: Soil/source sample SO-05A (Sample #: JCS-005) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-06A (Sample #: JCS-006) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0845 hrs: Soil/source sample SO-06B (Sample #: JCS-007) and soil/source field duplicate SO-100B (Sample #: JCS-065) were collected with a hand auger at a depth of 6 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0855 hrs: Soil/source sample SO-07A (Sample #: JCS-008) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-08A (Sample #: JCS-009) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1010 hrs: Soil/source sample SO-09A (Sample #: JCS-027) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper west-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-10A (Sample #: JCS-010) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1025 hrs: Soil/source sample SO-12A (Sample #: JCS-013) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper east-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1030 hrs: Soil/source sample SO-11A (Sample #: JCS-011) was collected with a hand auger at a depth of 0 to 18 inches bgs from the upper west-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1035 hrs: Soil/source sample SO-11B (Sample #: JCS-012) was collected with a hand auger at a depth of 18 to 42 inches bgs from the upper west-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis,

1040 hrs: Soil/source sample SO-14A (Sample #: JCS-015) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper east-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1050 hrs: Soil/source sample SO-16A (Sample #: JCS-017) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper south-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1055 hrs: Soil/source sample SO-16B (Sample #: JCS-018) was collected with a hand auger at a depth of 6 to 12 inches bgs from the upper south-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1100 hrs: Soil/source sample SO-13A (Sample #: JCS-014) was collected with a hand auger at a depth of 0 to 16 inches bgs from the upper western-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1106 hrs: Soil/source sample SO-18A (Sample #: JCS-020) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1110 hrs: Soil/source sample SO-15A (Sample #: JCS-016) was collected with a hand auger at a depth of 0 to 18 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1123 hrs: Soil/source sample SO-18B (Sample #: JCS-021) was collected with a hand auger at a depth of 6 to 12 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1125 hrs: Soil/source sample SO-17A (Sample #: JCS-019) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1130 hrs: Soil/source sample SO-19A (Sample #: JCS-022) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1143 hrs: Soil/source sample SO-20A (Sample #: JCS-023) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper southern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1150 hrs: Soil/source sample SO-21A (Sample #: JCS-024) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper southern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1155 hrs: Soil/source sample SO-22A (Sample #: JCS-025) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1200 hrs: Soil/source sample SO-23A (Sample #: JCS-026) was collected with a hand auger at a depth of 0 to 3 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1215 hrs: START personnel continued to complete CLP documentation and to package ground water and rinsate blank samples for shipment to the CLP Laboratory located in Mountainside, New Jersey. START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmiester soil classification and to prepare sample aliquots for field screening.

1540 hrs: Equipment rinsate blank sample RB-02 (Sample #: JCW-016: CLP #: A4B05) was collected from a hand auger sampling equipment (augers, scoops, etc.) and is associated with soil/source sampling activities.

1630 hrs: START personnel completed sample shipment preparation, organized and packaged traffic reports. START member Bitzas left the site and proceeded to deliverer samples and paperwork to FedEx, located in Menands, New York for shipment. Below is a summary of the traffic reports (TR), Airbill numbers (AB), and samples sent to the CLP Organics Laboratory (Chemtech Consulting Group) for PCB Aroclor analysis:

TR #: 1-040313-081601-0001, Master AB #: 5141 2418 0581, four groundwater samples for PCB Aroclor analysis. These four samples were shipped as dangerous goods due to previous sampling results and field observations and were to be combined with samples shipped under TR #: 1-040313-083108-0002 AB #: 5141 2418 0559, to constitute a complete sample delivery group (SDG) with appropriate quality assurance/quality control (QA/QC) samples.

TR #: 1-040313-083108-0002 AB #: 5141 2418 0559, seven ground water samples including one field duplicate, and one MS/MSD; plus two rinsate blank, and two performance evaluation samples for PCB Aroclor analysis. Samples from this TR were to be combined with samples shipped under TR #: 1-040313-081601-0001, Master AB #: 5141 2418 0581, to form a complete SDG.

1700 hrs: START personnel secured IDW drums, secured the site and departed the Jard property.

4 April 2013 (Thursday) – Soil/Source Sampling

Weather: Sunny, 45 to 50 °F

0700 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property.

0715 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, traffic concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O2, H2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.

START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

0800 hrs: Soil/source sample SO-24A (Sample #: JCS-078) was collected with a hand auger at a depth of 0 to 8 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-25A (Sample #: JCS-028) was collected with a hand auger at a depth of 0 to 12 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.

Soil/source sample SO-50A (Sample #: JCS-066) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.

0805 hrs: Soil/source sample SO-24B (Sample #: JCS-079) was collected with a hand auger at a depth of 8 to 24 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

0810 hrs: Soil/source sample SO-25B (Sample #: JCS-029) was collected with a hand auger at a depth of 12 to 30 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-24C (Sample #: JCS-080) was collected with a hand auger at a depth of 24 to 30 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

Soil/source sample SO-50B (Sample #: JCS-067) was collected with a hand auger at a depth of 12 to 16 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.

0815 hrs: Soil/source sample SO-25C (Sample #: JCS-030) was collected with a hand auger at a depth of 30 to 48 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.

0818 hrs: Soil/source sample SO-51A (Sample #: JCS-068) was collected with a hand auger at a depth of 0 to 6 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.

0823 hrs: Soil/source sample SO-26A (Sample #: JCS-031) was collected with a hand auger at a depth of 0 to 12 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

0826 hrs: Soil/source sample SO-52A (Sample #: JCS-069) was collected with a hand auger at a depth of 0 to 4 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.

0830 hrs: Soil/source sample SO-27A (Sample #: JCS-036) was collected with a hand auger at a depth of 0 to 18 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.

0833 hrs: Soil/source sample SO-26B (Sample #: JCS-032) was collected with a hand auger at a depth of 12 to 18 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

0835 hrs: Soil/source sample SO-27B (Sample #: JCS-038) was collected with a hand auger at a depth of 18 to 24 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.

0836 hrs: Soil/source sample SO-26C (Sample #: JCS-033) was collected with a hand auger at a depth of 18 to 24 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

0840 hrs: Soil/source sample SO-26D (Sample #: JCS-034) was collected with a hand auger at a depth of 24 to 36 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

0845 hrs: Soil/source sample SO-29A (Sample #: JCS-040) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.

0850 hrs: Soil/source sample SO-26E (Sample #: JCS-035) was collected with a hand auger at a depth of 36 to 42 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

0900 hrs: Soil/source sample SO-31A (Sample #: JCS-043) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.

0905 hrs: Soil/source sample SO-28A (Sample #: JCS-039) was collected with a hand auger at a depth of 0 to 8 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-31B (Sample #: JCS-044) was collected with a hand auger at a depth of 12 to 24 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.

0920 hrs: Soil/source sample SO-30A (Sample #: JCS-041) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the southwestern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-33A (Sample #: JCS-081) was collected with a hand auger at a depth of 0 to 18 inches bgs from the area located along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

0930 hrs: Soil/source sample SO-30B (Sample #: JCS-042) was collected with a hand auger at a depth of 12 to 24 inches bgs from the area located along the southwestern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-33B (Sample #: JCS-082) was collected with a hand auger at a depth of 18 to 30 inches bgs from the area located along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

0935 hrs: Soil/source sample SO-33C (Sample #: JCS-083) was collected with a hand auger at a depth of 30 to 36 inches bgs from the area located along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

0940 hrs: Soil/source sample SO-32A (Sample #: JCS-045) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the southwestern boundary of the Jard property and later submitted for PCB field screening analysis.

1035 hrs: Soil/source sample SO-35A (Sample #: JCS-047) was collected with a hand auger at a depth of 0 to 12 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1045 hrs: Soil/source sample SO-37A (Sample #: JCS-049) was collected with a hand auger at a depth of 0 to 6 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-53A (Sample #: JCS-084) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.

1055 hrs: Soil/source sample SO-39A (Sample #: JCS-051) was collected with a hand auger at a depth of 0 to 12 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-54A (Sample #: JCS-085) was collected with a hand auger at a depth of 0 to 8 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.

1100 hrs: Soil/source sample SO-39B (Sample #: JCS-052) was collected with a hand auger at a depth of 12 to 24 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmiester soil classification and to prepare sample aliquots for field screening.

1110 hrs: Soil/source sample SO-41A (Sample #: JCS-054) was collected with a hand auger at a depth of 0 to 8 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1120 hrs: Soil/source sample SO-41B (Sample #: JCS-055) was collected with a hand auger at a depth of 8 to 18 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1125 hrs: Soil/source sample SO-41C (Sample #: JCS-056) was collected with a hand auger at a depth of 18 to 30 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1145 hrs: Soil/source sample SO-34A (Sample #: JCS-046) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper northeastern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-43A (Sample #: JCS-058) was collected with a hand auger at a depth of 0 to 12 inches bgs from the southwestern toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1150 hrs: Soil/source sample SO-45A (Sample #: JCS-060) was collected with a hand auger at a depth of 0 to 18 inches bgs from the western toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1210 hrs: Soil/source sample SO-47A (Sample #: JCS-062) was collected with a hand auger at a depth of 0 to 6 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1210 hrs: START Member Hornok contacted and discussed sampling progress with COR Bosworth. Discussed number of samples collected to date, groundwater well sampling status, difficulties source sampling to depth on the upper portion of the source pile, source areas along western property boundary, and planned field screening and sampling activities. Scott Clifford (EPA Chemist) will be on site on Monday (4/8/13).

1225 hrs: Soil/source sample SO-38A (Sample #: JCS-050) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper northern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1230 hrs: Soil/source sample SO-36A (Sample #: JCS-048) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper northern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-49A (Sample #: JCS-064) was collected with a plastic scoop at a depth of 0 to 3 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1235 hrs: Soil/source sample SO-55A (Sample #: JCS-070) was collected with a plastic scoop at a depth of 0 to 4 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1350 hrs: Soil/source sample SO-56A (Sample #: JCS-071) was collected with a hand auger at a depth of 0 to 12 inches bgs from the western toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1405 hrs: Soil/source sample SO-57A (Sample #: JCS-072) was collected with a hand auger at a depth of 0 to 6 inches from the western toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1415 hrs: Soil/source sample SO-40A (Sample #: JCS-053) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper northwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1420 hrs: Soil/source sample SO-42A (Sample #: JCS-057) was collected with a hand auger at a depth of 0 to 12 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1425 hrs: Soil/source sample SO-59A (Sample #: JCS-074) was collected with a metal scoop at a depth of 0 to 4 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1430 hrs: Soil/source sample SO-58A (Sample #: JCS-073) was collected with a metal scoop at a depth of 0 to 2 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1435 hrs: Soil/source sample SO-60A (Sample #: JCS-075) was collected with a hand auger at a depth of 0 to 12 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1438 hrs: Soil/source sample SO-46A (Sample #: JCS-061) was collected with a hand auger at a depth of 0 to 8 inches from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1440 hrs: Soil/source sample SO-44A (Sample #: JCS-059) was collected with a hand auger at a depth of 0 to 6 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1505 hrs: Soil/source sample SO-61A (Sample #: JCS-182) was collected with a hand auger at a depth of 0 to 12 inches from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1515 hrs: Soil/source sample SO-63A (Sample #: JCS-077) was collected with a hand auger at a depth of 0 to 8 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1520 hrs: Soil/source sample SO-62A (Sample #: JCS-076) was collected with a hand auger at a depth of 0 to 12 inches from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-64A (Sample #: JCS-183) was collected with a hand auger at a depth of 0 to 4 inches from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1630 hrs: Soil/source sample SO-48A (Sample #: JCS-063) was collected with a plastic scoop at a depth of 0 to 3 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1700 hrs: Equipment rinsate blank sample RB-03 (Sample #: JCW-017: CLP #: A4B06) was collected from hand auger sampling equipment (augers, scoops, etc.) associated with soil/source sampling activities.

1705 hrs: Equipment rinsate blank sample RB-04 (Sample #: JCW-018: CLP #: A4B07) was collected from hand auger sampling equipment (augers, scoops, etc.) associated with soil/source sampling activities.

1730 hrs: START personnel secured IDW drums, secured the site and departed the Jard property.

5 April 2013 (Friday) – Soil/Source Sampling

Weather: Partly cloudy, low 50 °F

0730 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property. COR Bosworth also arrived on site for meeting with EPA and town representatives.

0745 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven

terrain, trips-slips-falls, heavy lifting, traffic concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O2, H2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.

START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

START embers Kelly and Hornok held discussions with COR Bosworth regarding current status of sampling activities, Flex-viewer Data Management Resource, and groundwater shipment/delivery.

0845 hrs: Soil/source sample SO-65A (Sample #: JCS-086) was collected with a hand auger at a depth of 0 to 8 inches from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmiester soil classification and to prepare sample aliquots for field screening.

0855 hrs: Soil/source sample SO-66A (Sample #: JCS-087) was collected with a plastic scoop at a depth of 0 to 3 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0900 hrs: Soil/source sample SO-67A (Sample #: JCS-088) was collected with a hand auger at a depth of 0 to 6 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-68A (Sample #: JCS-089) was collected with a hand auger at a depth of 0 to 12 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0915 hrs: Soil/source sample SO-70A (Sample #: JCS-093) was collected with a hand auger at a depth of 0 to 12 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-72A (Sample #: JCS-095) was collected with a hand auger at a depth of 0 to 10 inches bgs from the drainage area at the base of the northeastern corner of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0920 hrs: Soil/source sample SO-69A (Sample #: JCS-090) was collected with a hand auger at a depth of 0 to 12 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-72B (Sample #: JCS-096) was collected with a hand auger at a depth of 10 to 20 inches bgs from the drainage area at the base of the northeastern corner of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0925 hrs: Soil/source sample SO-69B (Sample #: JCS-091) was collected with a hand auger at a depth of 12 to 36 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0930 hrs: Soil/source sample SO-69C (Sample #: JCS-092) was collected with a hand auger at a depth of 36 to 48 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0945 hrs: Soil/source sample SO-76A (Sample #: JCS-102) was collected with a hand auger at a depth of 0 to 14 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0950 hrs: Soil/source sample SO-71A (Sample #: JCS-094) was collected with a hand auger at a depth of 0 to 24 inches bgs from the lower eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-74A (Sample #: JCS-098) was collected with a hand auger at a depth of 0 to 12 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1000 hrs: Soil/source sample SO-74B (Sample #: JCS-099) was collected with a hand auger at a depth of 12 to 30 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1005 hrs: Soil/source sample SO-73A (Sample #: JCS-097) was collected with a hand auger at a depth of 0 to 28 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1010 hrs: Soil/source sample SO-75A (Sample #: JCS-100) was collected with a hand auger at a depth of 0 to 12 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1020 hrs: Soil/source sample SO-77A (Sample #: JCS-101) was collected with a hand auger at a depth of 0 to 18 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1100 hrs: VT DEC ANR Wetland Specialist Julie Foley arrived on-site to discuss wetland areas around the site with START personnel. Wetland Specialist Foley provide START with previously completed wetland delineation map of wetlands to west of Park Street. START members Hornok, Bitzas and Kelly reviewed available wetland references/maps with Specialist Foley.

1130 hrs: Equipment rinsate blank sample RB-05 (Sample #: JCW-019: CLP #: A4B08) was collected from hand auger sampling equipment (augers, scoops, etc.) associated with soil/source sampling activities.
COR Bosworth returned from meeting with Section Chief Meghan Cassidy to review operations.

1140 hrs: COR Bosworth and Section Chief Cassidy departed site.
Wetland Specialist Foley accompanied START members Kelly and Bitzas on reconnaissance of wetland areas to the west of Park Street and background wetland area along Bowen Road north of the Jard property.

1200 hrs: START personnel completed sample shipment preparation, organized and packaged traffic reports. START members Robinson and Saylor proceeded to deliverer samples and paperwork to FedEx, located in Brattleboro, VT for shipment. Below is a summary of the TRs AB numbers and samples sent to the CLP Organics Laboratory (Chemtech Consulting Group) for PCB Aroclor analysis:
TR #: 1-040513-111321-0003, Master AB #: 5141 2418 0662, four aqueous equipment rinsate blank samples for PCB Aroclor analysis.

1215 hrs: Wetland Specialist Foley confirmed that wetland delineation map of wetlands to west of Park Street is generally the same as current conditions based on reconnaissance and review of area. Foley also noted that the proposed background area to the north along Bowen Road, contained similar types of wetland (PEM, PSS, POW, etc.). Wetland Specialist Foley left the site to attend a local meeting/inspection.
START member Kelly spoke START PM McDuffee regarding leaving the Geoprobe Truck secured on the VTrans property for the weekend in an effort to be more sustainable/"Green". PM McDuffee agreed to plan.

START members Hornok and Kelly spoke with a VTrans representative at the Bowen Road facility regarding leaving the Geoprobe Truck secured on the VTDOT property for the weekend in an effort to be more sustainable/"Green". The VTrans representative agreed and explained there security for the weekend hours and where it would be best to park the vehicle. Informed PM McDuffee agreed to plan.

1230 hrs: Remaining START personnel secured IDW drums, secured the site and departed the Jard property for the START office located in Andover, MA.

8 April 2013 (Monday) – Soil/Source Sampling

Weather: Partly sunny, high 50 to low 60 °F

1030 hrs: START members Kelly, Hornok, Bitzas, Eric Ackerman, Chris Dupree, Robinson, Jonathan Saylor, and Robert Sharp arrived at the Jard property. START Member Hornok picked up Geoprobe truck from VT DOT facility along Bowen Road. In addition, EPA SAM Martha Bosworth had already arrived on-site.

1045 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, Geoprobe Work concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, dogs, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O2, H2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.

START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (Geoprobe equipment, augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

1100 hrs: Soil boring activities began at soil boring location SB-05 located on the south-eastern area of the former building footprint in an area previously excavated during an EPA Removal action. In addition, EPA Office of Environmental Measurement and Evaluation (OEME) Mobile Laboratory chemist Scott Clifford arrived on-site to perform PCB field screening analysis. Sample aliquots for PCB field screening, collected to date between 1 April and 5 April, were transferred to EPA chemist Clifford for processing and PCB field screening analyses.

START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmiester soil classification and to prepare sample aliquots for field screening.

1130 hrs: Soil/source sample SB-05A (Sample #: JCS-137) was collected using a Geoprobe macrocore from a depth of 2.1 to 4 feet bgs from soil boring SB-05 and later submitted for PCB field screening analysis.

1135 hrs: Soil/source sample SB-05B (Sample #: JCS-138) was collected using a Geoprobe macrocore from a depth of 5.3 to 5.6 feet bgs from soil boring SB-05 and later submitted for PCB field screening analysis.

1140 hrs: START personnel completed soil boring activities at location SB-05. Soil boring SB-05 was completed to a depth of 6 feet bgs due to refusal. Team backfilled hole with sand and bentonite and relocated to next location. Boring activities began at soil boring location SB-07 located on the south-eastern area of the former building footprint in an area previously excavated during an EPA Removal action.

1145 hrs: Soil/source sample SB-07A (Sample #: JCS-139) was collected using a Geoprobe macrocore from a depth of 2 to 2.9 feet bgs from soil boring SB-07 and later submitted for PCB field screening analysis.

1155 hrs: START personnel completed soil boring activities at location SB-07. Soil boring SB-07 was completed to a depth of 4 feet bgs due to refusal. Team backfilled hole with sand and bentonite and relocated to next location. Boring activities began at soil boring location SB-09 located on the south-eastern area of the former building footprint in an area previously excavated during an EPA Removal action. In addition, boring activities began at soil boring location SB-04 located beneath the former transformer area located on the southern portion of the Jard property.

1210 hrs: Soil/source sample SB-09A (Sample #: JCS-140) was collected using a Geoprobe macrocore from a depth of 2.9 to 3.4 feet bgs from soil boring SB-09 and later submitted for PCB field screening analysis.

In addition, soil/source sample SB-09B (Sample #: JCS-141) was collected using a Geoprobe macrocore from a depth of 3.4 to 4 feet bgs from soil boring SB-09 and later submitted for PCB field screening analysis.

1215 hrs: START Member Kelly decided to collect an additional sample from upper core section to obtain analyses throughout the core section. Soil/source sample SB-09C (Sample #: JCS-142) was collected using a Geoprobe macrocore from a depth of 1.7 to 2.9 feet bgs from soil boring SB-09 and later submitted for PCB field screening analysis.

1220 hrs: Soil/source sample SB-04A (Sample #: JCS-145) was collected using a Geoprobe macrocore from a depth of 1.1 to 1.3 feet bgs from soil boring SB-04 and later submitted for PCB field screening analysis.

In addition, soil/source sample SB-04B (Sample #: JCS-146) was collected using a Geoprobe macrocore from a depth of 1.3 to 2 feet bgs from soil boring SB-04 and later submitted for PCB field screening analysis.

1230 hrs: START personnel completed soil boring activities at location SB-04. Soil boring SB-04 was completed to a depth of 2 feet bgs due to refusal. Team backfilled hole with sand and bentonite and relocated to next location. Boring activities began at soil boring location SB-06 located on the south-western area of the former building footprint in an area previously excavated during an EPA Removal action.

1235 hrs: Soil/source sample SB-06A (Sample #: JCS-147) was collected using a Geoprobe macrocore from a depth of 2.3 to 3.3 feet bgs from soil boring SB-06 and later submitted for PCB field screening analysis.

In addition, soil/source sample SB-06B (Sample #: JCS-148) was collected using a Geoprobe macrocore from a depth of 3.3 to 4 feet bgs from soil boring SB-06 and later submitted for PCB field screening analysis.

1240 hrs: After reviewing the entire core, START Member Kelly decided to collect an additional sample from upper core section to obtain analyses throughout the core to represent various depths. Soil/source sample SB-06C (Sample #: JCS-149) was collected using a Geoprobe macrocore from a depth of 1.5 to 2.3 feet bgs from soil boring SB-06 and later submitted for PCB field screening analysis.

1245 hrs: START personnel completed soil boring activities at location SB-06. Soil boring SB-06 was completed to a depth of 4 feet bgs due to refusal. Team backfilled hole with sand and bentonite and relocated to next location.

1250 hrs: Soil/source sample SB-09D (Sample #: JCS-143) was collected using a Geoprobe macrocore from a depth of 7.4 to 8 feet bgs from soil boring SB-09 and later submitted for PCB field screening analysis.

1255 hrs: Soil/source sample SB-09E (Sample #: JCS-144) was collected using a Geoprobe macrocore from a depth of 10.1 to 11 feet bgs from soil boring SB-09 and later submitted for PCB field screening analysis.

1300 hrs: START personnel completed soil boring activities at location SB-09. Soil boring SB-09 was completed to a depth of 11 feet bgs. Team backfilled hole with sand and bentonite and relocated to next location. Boring activities began at soil boring location SB-08 located on the south-eastern area of the former building footprint in an area previously excavated during an EPA Removal action.

1345 hrs: Soil/source sample SB-08A (Sample #: JCS-150) was collected using a Geoprobe macrocore from a depth of 1.2 to 4 feet bgs from soil boring SB-08 and later submitted for PCB field screening analysis.

1350 hrs: Soil/source sample SB-08B (Sample #: JCS-151) was collected using a Geoprobe macrocore from a depth of 6.9 to 8 feet bgs from soil boring SB-08 and later submitted for PCB field screening analysis.

1400 hrs: Soil/source sample SB-08C (Sample #: JCS-152) was collected using a Geoprobe macrocore from a depth of 8.7 to 10 feet bgs from soil boring SB-08 and later submitted for PCB field screening analysis.
In addition, soil/source sample SB-08D (Sample #: JCS-153) was collected using a Geoprobe macrocore from a depth of 10 to 11 feet bgs from soil boring SB-08 and later submitted for PCB field screening analysis.

1410 hrs: START personnel completed soil boring activities at location SB-08. Soil boring SB-08 was completed to a depth of 11 feet bgs due to equipment issues (stuck). Team did not backfilled hole, will work to retrieve equipment later and backfill with sand and bentonite; relocated to next location. Boring activities began at soil boring location SB-10 located on the eastern edge of the former building footprint in an area previously excavated during an EPA Removal action.
In addition, soil/source sample SO-81A (Sample #: JCS-106) was collected with a hand auger at a depth of 0 to 18 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

1415 hrs: Soil/source sample SO-80A (Sample #: JCS-103) was collected with a hand auger at a depth of 0 to 18 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-82A (Sample #: JCS-109) was collected with a hand auger at a depth of 0 to 18 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

1420 hrs: Soil/source sample SO-81B (Sample #: JCS-107) was collected with a hand auger at a depth of 18 to 36 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

1425 hrs: Soil/source sample SO-80B (Sample #: JCS-104) was collected with a hand auger at a depth of 18 to 30 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-81C (Sample #: JCS-108) was collected with a hand auger at a depth of 36 to 54 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-82B (Sample #: JCS-110) was collected with a hand auger at a depth of 18 to 30 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

1435 hrs: Soil/source sample SO-80C (Sample #: JCS-105) was collected with a hand auger at a depth of 30 to 40 inches bgs from an area along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.

1445 hrs: Soil/source sample SO-83A (Sample #: JCS-111) was collected with a hand auger at a depth of 0 to 12 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-84A (Sample #: JCS-112) was collected with a hand auger at a depth of 0 to 18 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.

1450 hrs: Soil/source sample SO-85A (Sample #: JCS-114) was collected with a hand auger at a depth of 0 to 12 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.

1455 hrs: Soil/source sample SO-84B (Sample #: JCS-113) and soil/source sample field duplicate SO-102B (Sample #: JCS-207) were collected with a hand auger at a depth of 18 to 36 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.

1500 hrs: Soil/source sample SO-85B (Sample #: JCS-115) and soil/source sample field duplicate SO-101B (Sample #: JCS-206) were collected with a hand auger at a depth of 12 to 24 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.

1510 hrs: Soil/source sample SO-85C (Sample #: JCS-116) was collected with a hand auger at a depth of 24 to 30 inches from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-86A (Sample #: JCS-117) was collected with a hand auger at a depth of 0 to 18 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.
Soil/source sample SO-87A (Sample #: JCS-118) was collected with a hand auger at a depth of 0 to 18 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.

1520 hrs: Soil/source sample SO-87B (Sample #: JCS-119) was collected with a hand auger at a depth of 18 to 36 inches bgs from an area along the northern boundary of the Jard property and later submitted for PCB field screening analysis.

1530 hrs: Soil/source sample SO-88A (Sample #: JCS-120) was collected with a hand auger at a depth of 0 to 18 inches bgs from an area along the eastern edge of the building footprint on the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-89A (Sample #: JCS-122) was collected with a hand auger at a depth of 0 to 12 inches bgs from the northeastern corner of the Jard property and later submitted for PCB field screening analysis.

1535 hrs: Soil/source sample SO-88B (Sample #: JCS-121) was collected with a hand auger at a depth of 18 to 30 inches bgs from along the eastern edge of the building footprint on the Jard property and later submitted for PCB field screening analysis.

1540 hrs: Soil/source sample SO-89B (Sample #: JCS-123) was collected with a hand auger at a depth of 12 to 24 inches bgs from the northeastern corner of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-90A (Sample #: JCS-124) was collected with a hand auger at a depth of 0 to 18 inches bgs from along the eastern edge of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

1545 hrs: Soil/source sample SO-91A (Sample #: JCS-125) was collected with a hand auger at a depth of 0 to 10 inches from the northeastern corner of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SB-10A (Sample #: JCS-154) was collected using a Geoprobe macrocore from a depth of 0.4 to 1.3 feet bgs from soil boring SB-10 and later submitted for PCB field screening analysis.

1600 hrs: START personnel completed soil boring activities at location SB-10. Soil boring SB-10 was completed to a depth of 2 feet bgs due to refusal. Team backfilled sample hole with sand and bentonite.
Soil/source sample SO-92A (Sample #: JCS-126) was collected with a hand auger at a depth of 0 to 8 inches from the northeastern corner of the Jard property and later submitted for PCB field screening analysis.

1615 hrs: Soil/source sample SO-93A (Sample #: JCS-127) was collected with a plastic scoop at a depth of 0 to 2 inches bgs from an area along the northeastern edge of the building footprint on the Jard property and later submitted for PCB field screening analysis.

1635 hrs: Equipment rinsate blank sample RB-06 (Sample #: JCW-020: CLP #: A4B09) was collected from hand auger sampling equipment (augers, scoops, etc.) associated with soil/source sampling activities.

1640 hrs: Equipment rinsate blank sample RB-07 (Sample #: JCW-021: CLP #: A4B10) was collected from the Geoprobe macrocore system sampling equipment and is associated with soil/source sampling activities.

1700 hrs: START personnel secured IDW drums, secured the site and departed the Jard property.

9 April 2013 (Tuesday) – Soil/Source and Surface Soil Sampling
Weather: Cloudy, high 50 to low 60 °F

0700 hrs: START members Kelly, Hornok, Bitzas, Ackerman, Dupree, Robinson, Saylor, and Sharp arrived at the Jard property. EPA SAM Martha Bosworth had previously arrived on-site. In addition, Chemist Clifford also arrived on-site.

0715 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, traffic, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O2, H2S, CO, and PID meter. Background ambient readings: LEL = 0%; O_2 = 20.9%; H_2S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.
START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

0800 hrs: START members Kelly, Robinson, and Scesny began marking sample locations and documenting property features on the Park Street residential properties.

0810 hrs: Soil/source sample SO-95A (Sample #: JCS-185) was collected with a hand auger at a depth of 0 to 8 inches bgs from an area along the northwestern edge of the building footprint on the Jard property and later submitted for PCB field screening analysis.

0815 hrs: Soil/source sample SO-94A (Sample #: JCS-184) was collected with a hand auger at a depth of 0 to 12 inches bgs from an area along the northwestern edge of the building footprint on the Jard property and later submitted for PCB field screening analysis.

SDG# A4B24 (4122113)

USEPA CLP Organics COC (LAB COPY)

DateShipped: 4/18/2013
CarrierName: FedEx
AirbillNo: 5141 2418 0938

CHAIN OF CUSTODY RECORD

Case #: 43392
Cooler #: DG Cans

COPY

No: 1-041713-114538-0006
Lab: ChemTech Consulting Group
Lab Contact: Divya Mehta
Lab Phone: 908-789-8900

HRS Reference #72

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	For Lab Use Only
A4B17	Soil/ START	Grab	CLP PCBs(21)	537 (4 C) (1)	JCS-130	04/01/2013 14:30		
A4B18	Soil/ START	Grab	CLP PCBs(21)	538 (4 C) (1)	JCS-136	04/01/2013 16:05		
A4B19	Soil/ START	Grab	CLP PCBs(21)	539 (4 C) (1)	JCS-138	04/08/2013 11:35		
A4B20	Soil/ START	Grab	CLP PCBs(21)	540 (4 C) (1)	JCS-148	04/08/2013 12:35		
A4B21	Soil/ START	Grab	CLP PCBs(21)	541 (4 C) (1)	JCS-153	04/08/2013 14:00		
A4B22	Soil/ START	Grab	CLP PCBs(21)	542 (4 C) (1)	JCS-143	04/08/2013 12:50		
A4B23	Soil/ START	Grab	CLP PCBs(21)	543 (4 C) (1)	JCS-006	04/03/2013 08:40		
A4B30	Soil/ START	Grab	CLP PCBs(21)	565 (4 C) (1)	JCS-046	04/04/2013 11:45		
A4B31	Soil/ START	Grab	CLP PCBs(21)	567 (4 C) (1)	JCS-048	04/04/2013 12:30		
A4B32	Soil/ START	Grab	CLP PCBs(21)	569 (4 C) (1)	JCS-061	04/04/2013 14:38		
A4B34	Soil/ START	Grab	CLP PCBs(21)	573 (4 C) (1)	JCS-183	04/04/2013 15:20		

Special Instructions: Samples shipped as dangerous goods due to elevated PCB concentrations noted in field screening analysis. Please combine these samples with samples shipped under Fedex Airbill # 5141 2418 0743, COC #: 1-041713-115310-0007 to create one SDG.

Temp: 6°

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CLP PCBs=SOM01.2 Aroclors

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Samples		4/18/13	Airbill # 5141 2418 0938	4/18/13	1340						
						Samples	Airbill # 5141 2418 0938		JOHN TENGCO	4/19/13	935

(A4B34 is last sample of this SDG #)

5/8/13 LLK

SDG # A4B24

HRS Reference #72

USEPA CLP Organics COC (LAB COPY)
DateShipped: 4/17/2013
CarrierName: FedEx
AirbillNo: 5141 2418 0743

CHAIN OF CUSTODY RECORD

COPY

Case #: 43392
Cooler #: MM1276

No: 1-041713-115310-0007
Lab: ChemTech Consulting Group
Lab Contact: Divya Mehta
Lab Phone: 908-789-8900

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	For Lab Use Only
A4B24	Soil/ START	Grab	CLP PCBs(21)	544 (4 C) (1)	JCS-008	04/03/2013 08:55		
A4B25	Soil/ START	Grab	CLP PCBs(21)	553 (4 C) (1)	JCS-015	04/03/2013 10:40		
A4B26	Soil/ START	Grab	CLP PCBs(21)	556 (4 C) (1)	JCS-475	04/03/2013 10:40		
A4B27	Soil/ START	Grab	CLP PCBs(21)	558 (4 C) (1)	JCS-024	04/03/2013 11:50		
A4B28	Soil/ START	Grab	CLP PCBs(21)	560 (4 C) (1)	JCS-025	04/03/2013 11:55		
A4B29	Soil/ START	Grab	CLP PCBs(21), CLP PCBs(21)	562 (4 C), 563 (4 C) (2)	JCS-026	04/03/2013 12:00		
A4B33	Soil/ START	Grab	CLP PCBs(21)	571 (4 C) (1)	JCS-076	04/04/2013 15:20		
A4B35	Soil/ START	Grab	CLP PCBs(21)	575 (4 C) (1)	JCS-086	04/05/2013 08:45		
A4B56 PE	Soil/ START	Grab	CLP PCBs(21)	620 (4 C) (1)	JCS-478	04/17/2013 07:00		
A4B57 PE	Soil/ START	Grab	CLP PCBs(21)	621 (4 C) (1)	JCS-479	04/17/2013 07:00		

Sample(s) to be used for Lab QC: A4B29 - Special Instructions: Please combine with samples shipped under FedEx Airbill #: 5141 2418 0710, COC #: 1-041713-114538-0006 to form one sample delivery group.

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CLP PCBs=SOM01.2 Aroclors

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Samples	C Hannah	4/17/13	Airbill No. 5141 2418 0743	4/17/13	1300						
						Samples	Airbill # 5141 2418 0743		George Negron	4/18/13	945

Temp: 5°C

5/8/13 10

DG/ESAT

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

FORM DC-2

Yard company
Weston

LABORATORY NAME : CHEMTECH CONSULTING GROUP, INC.

CITY / STATE : MOUNTAINSIDE, NJ

CASE NO : 43392 SDG NO : A4B24

SDG NOs TO FOLLOW N/A N/A

MOD. REF. NO. : N/A N/A

CONTRACT NO : EPW11030

SOW NO : SOM 01.2

RECEIVED
MAY 09 2013
By

MAY 09 2013

All documents delivered in the Complete SDG File (CSF) must be original documents where possible.

		PAGE NOS: FROM	PAGE NOS: TO	CHECK LAB	CHECK USEPA Weston
1.	Inventory Sheet (DC-2) (Do not number)				
2.	SDG Narrative	1	8	↘	✓
3.	SDG Cover Sheet/Traffic Report	9	11	↘	✓
4.	**Trace Volatiles Data**				
a.	**QC Summary**				
	Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	NA	NA	↘	✓
	Matrix Spike/Matrix Spike Duplicate Recover (Form III VOA) (if requested by USEPA Region)	NA	NA	↘	
	Method Blank Summary (Form IV VOA)	NA	NA	↘	
	GC/MS Instrument Performance Check (Form V VOA)	NA	NA	↘	
	Internal Standard Area and RT Summary (Form VIII VOA)	NA	NA	↘	
b.	**Sample Data**	NA	NA	↘	
	TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)				
	Tentatively Identified Compounds (Form I VOA-TIC)				
	Reconstructed total ion chromatograms (RIC) for each sample				
	For each sample:				
	Raw Spectra and background-subtracted mass spectra of target compounds identified				
	Quantitation reports				
	Mass Spectra of all reported TICs with three best library matches				
c.	**Standards Data (All Instruments)**	NA	NA		
	Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)			↘	
	RICs and Quantitaation Reports for all Standards				
	Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)				
	RICs and Quantitation Reports for all Standards				
d.	**Raw/Quality Control**				
	BFB	NA	NA	↘	
	Blank Data	NA	NA	↘	
	Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	NA	NA	↘	↓

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4B24	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

e. Trace SIM Data (Place at the end of the Trace Volatiles Section	NA	NA	\	✓
[Form I VOA-SIM; Form II VOA-SIM1 and VOA-SIM2; Form IV-VOA-SIM; Form VI VOA-SIM; Form VII VOA-SIM; Form VIII VOA-SIM; and all raw data for QC, Samples, and Standards.]				
5. Low/Med Volatiles Data				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1, VOA-2, VOA-3, VOA-4)	NA	NA	\	
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (if requested by USEPA Region)	NA	NA	\	
Method Blank Summary (Form IV VOA)	NA	NA	\	
GC/MS Instrument Performance Check (Form V VOA)	NA	NA	\	
Internal Standard Area and RT Summary (Form VIII VOA)	NA	NA	\	
b. Sample Data	NA	NA		
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)			\	
Tentatively Identified Compounds (Form I VOA-TIC)				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified				
Quantitation reports				
Mass Spectra of all reported TICs with three best library matches				
c. Standards Data (All Instruments	NA	NA		
Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)			\	
RICs and Quantitation Reports for all Standards				
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)				
RICs and Quantitation Reports for all Standards				
d. Raw/Quality Control (QC)Data				
BFB	NA	NA	\	
Blank Data	NA	NA	\	✓
Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	NA	NA	\	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4B24	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

6. **Semivolatiles Data**

a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4)	NA	NA	✓	✓
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)	NA	NA	✓	✓
Method Blank Summary (Form IV SV)	NA	NA	✓	✓
GC/MS Instrument Performance Check (Form V SV)	NA	NA	✓	✓
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	NA	NA	✓	✓
b. Sample Data	NA	NA		
TCL Results - Organics Analysis Data Sheet (Form I SV-1 and SV-2)			✓	✓
Tentatively Identified Compounds (Form I SV-TIC)				✓
Reconstructed total ion chromatograms (RIC) for each sample				✓
For each sample:	NA	NA		
Raw Spectra and background-subtracted mass spectra of target compounds			✓	✓
Quantitation reports				✓
Mass Spectra of TICs with three best library matches				✓
GPC chromatograms (if GPC is r				✓
c. Standards Data (All Instruments)	NA	NA	✓	
Initial Calibration Data (Form VI SV-1, SV-2, SV-3)				✓
RICs and Quantitation				✓
Continuing Calibration Data (Form VII SV-1, S				✓
RICs and Quantitation Reports for all Standards				✓
d. Raw (QC)Data				
DFTPP	NA	NA	✓	✓
Blank Data	NA	NA	✓	✓
MS/MSD Data (if requested by USEPA Region)	NA	NA	✓	✓
e. Raw GPC Data	NA	NA	✓	✓

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4B24	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

Semivolatile SIM Data [Form I SV-SIM; Form II SV-SIM1 and SV-SIM2; Form III-SV-SIM1 and SV-SIM2 (if required; Form IV SV-SIM; Form VI SV-SIM; Form VII SV-SIM; Form VIII SV-SIM1 and SV-SIM2; and all raw data for QC, Samples, and Standards.]	NA	NA		

7. **Pesticides Data**

a. QC Summary				
Surrogate Recovery Summary (Form II PEST-1 and PEST-2)	NA	NA		
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III PEST-1 and PEST-2)	NA	NA		
Laboratory Control Sample Recovery (Form III PEST-3 and PEST-4)	NA	NA		
Method Blank Summary (Form IV PEST)	NA	NA		
b. Sample Data	NA	NA		
TCL Results - Organics Analysis Data Sheet (Form I PEST)				
Chromatograms (Primary Column)				
Chromatograms from second GC column confirmation				
GC Integration report or data system printout				
Manual work sheets				
For Pesticides by GC/MS				
Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	NA	NA		
Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)				
Toxaphene Initial Calibration (Form VI PEST-3 and PEST-4)				
Analyte Resolution Summary (Form VI PEST-5, per column)				
Performance Evaluation Mixture (Form VI PEST-6)				
Individual Standard Mixture A (Form VI PEST-7)				
Individual Standard Mixture B (Form VI PEST-8)				
Individual Standard Mixture C (Form VI PEST-9 and PEST-10)				
Calibration Verification Summary (Form VII PEST-1)				
Calibration Verification Summary (Form VII PEST-2)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4B24	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

Calibration Verification Summary (Form VII PEST-3)					N/A
Calibration Verification Summary (Form VII PEST-4)					
Analytical Sequence (Form VIII PEST)					
Florisil Cartridge Check (Form IX PEST-1)					
Pesticide GPC Calibration (Form IX PEST-2)					
Identification Summary for Single Component Analytes (Form X PEST-1)					
Identification Summary for Toxaphene Form X PEST-2)					
Chromatograms and data system printouts					
A printout of Retention Times and corresponding peak areas or peak heights					
d. Raw QC Data					
Blank Data	NA	NA			
Matrix Spike/Matrix Spike Duplicate Data	NA	NA			
Laboratory Control Sample	NA	NA			
e. Raw GPC Data	NA	NA			
f. Raw Florisil Data	NA	NA			
8. Aroclor Data					
a. QC Summary					
Surrogate Recovery Summary (Form II ARO-1 and ARO-2)	12	13			
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)	14	17			
Laboratory Control Sample Recovery (Form III ARO-3 and ARO-4)	18	19			
Method Blank Summary (Form IV ARO)	20	21			
b. Sample Data	22	146			
TCL Results - Organics Analysis Data Sheet (Form I ARO)	NA	NA			
Chromatograms (Primary Column)	NA	NA			
Chromatograms from second GC column confirmation	NA	NA			
GC Integration report of data system printout	NA	NA			
Manual work sheets	NA	NA			
For Aroclors by GC/MS	NA	NA			

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4B24	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			✓	✓
c. Standards Data	147	318		
Aroclors Initial Calibration (Form VI ARO-1,ARO-2, and ARO-3)			✓	✓
Calibration Verification Summary (Form VII ARO-1)			✓	✓
Analytical Sequence (Form VIII ARO)			✓	✓
Identification Summary for Multicomponent Analytes (Form X ARO)			✓	✓
Chromatograms and data system printouts			✓	✓
A printout of Retention Times and corresponding peak areas or peak heights			✓	✓
d. Raw QC Data				
Blank Data	319	368	✓	✓
Matrix Spike/Matrix Spike Duplicate Data	369	390	✓	✓
Laboratory Control Sample (LCS) Data	391	402	✓	✓
e. Raw GPC Data (if performed)	NA	NA	✓	✓
9. Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	403	480	✓	✓
Internal sample and sample extract transfer chain-of-custody records	494	495	✓	✓
Screening records	NA	NA	✓	✓
All instrument output, including strip charts from screening activities (describe or list)				✓
10. EPA Shipping/Receiving Documents				
Airbills (No. of shipments 4)	481	484	✓	✓
Chain of Custody Records	485	486	✓	✓
Sample Tags			✓	✓
Sample Log-in Sheet (Lab & DC-1)	497 487	503 493	✓	✓
Miscellaneous Shipping/Receiving Records (describe or list)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4B24	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

11. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)

				✓
Sample Transfer	494	495	✓	✓

12. Other Records (describe or list)

Telephone Communication Log	NA	NA	✓	✓
PE Instructions	496	497	✓	✓

13. Comments

Completed by: (CLP Lab)	M. Idred V Reyes (Signature)	M. Idred V. Reyes / DCO (Printed Name/Title)	5/8/13 (Date)
Verified by: (CLP Lab)	H Prajapati (Signature)	Himanshu Prajapati (Printed Name/Title)	05/08/13 (Date)
Audited by: (USEPA/Weston)	(Signature)	Bill Mahany Prin. Proj Scientist (Printed Name/Title)	5/30/13 (Date)

Evidence Audit Photocopy

COPY

Site: Jard Company Inc
TDD: 12-10-0008
TASK: 0850

EPA NEW ENGLAND
COMPLETE SDG FILE
RECEIPT / TRANSFER FORM

HRS Reference #72

Case : 43392 SDG : A4B24

Receipt Date	Received By : Name	Init.	Affiliation	CSF Activity	Custody Seals Present / Intact	Released To	Date
05/09/13	Doris Guzman	DG	ESAT	Received for Transfer	(Y) N (Y) N	Weston	05/09/13
5/9/13	B. Mahany	BM	Weston	Sterge + Validation	(Y) N (Y) N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		

EPA-NE - DQO SUMMARY FORM

A separate Form should be completed for each sampling event. Refer to Attachment A for instructions on completing this form, Attachment B for a complete list of the parameter codes and Attachment C for an example of a completed form.

1. EPA Program: TSCA (CERCLA) RCRA DW NPDES CAA
Other:
Projected Date(s) of Sampling Spring (April/May) 2013
EPA Site Manager Martha Bosworth
EPA Case Team Members

Site Name Jard Company Inc
Site Location Bennington, Vermont
Assigned Site Latitude/Longitude 42° 53' 21.5" north/73° 11' 21.9" west
CERCLA Site/Spill Identifier No VTD048141741 (Include Operable Unit)
Phase: ERA SA/SI pre-RI RI (phase I, etc.) FS RD RA post-RA
(circle one) Other: Site Reassessment

2. QAPP Title and Revision Date Site Assessment Program Site Specific Quality Assurance Project Plan for Surface and Subsurface Soil/Source, Ground Water, and Sediment Sampling Jard Company Inc, Bennington, Vermont dated 11 January 2013
Approved by: Martha Bosworth Date of Approval: TBD
Title of Approving Official: Site Assessment Manager Organization*: EPA
*If other than EPA, record date approval authority was delegated:

EPA Oversight Project (circle one) Y (N) Type of EPA Oversight (circle one) PRP or FF Other:
Confirmatory Analysis for Field Screening (Y) N If EPA Oversight or Confirmatory: % splits TBD
Are comparability criteria documented? Y N

3.									
a.	Matrix Code[1]	SO	SO	SO	GW	GW	SD	SD	SD
b.	Parameter Code[2]	PCB Aroclors	PCB Aroclors	PCB Congeners	PCB Aroclors	PCB Congeners	PCB Aroclors	PCB Aroclors	PCB Congeners
c.	Preservation Code[3]	5	5	5	5	5	5	5	5
d.	Analytical Services Mechanism	DAS or CLP	DAS or CLP	CLP	DAS or CLP	DAS or CLP	DAS or CLP	DAS or CLP	CLP
e.	No. of Sample Locations	65	28	2	21	2	60	60	60
	Field QC:								
f.	Field Duplicate Pairs	4	2		2	5	5	5	5
g.	Equipment Blanks	See RB	See RB	See RB	See RB	See RB	See RB	See RB	See RB
h.	VOA Trip Blanks	0	0	0	0	0	0	0	0
i.	Cooler Temperature Blanks	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler
j.	Bottle Blanks	0	0	0	0	0	0	0	0
k.	Other:								
l.	PES sent to Laboratory	NA	6	TBD	3	TBD	NA	3	TBD
	Laboratory QC:								
m.	Reagent Blank	0	0	0	0	0	0	0	0
n.	Duplicate	0	0	0	0	0	0	0	0
o.	Matrix Spike	0	2	0	1	0	1	0	0
p.	Matrix Spike Duplicate	0	2	0	1	0	1	0	0
q.	Other:								

4. Site Information
Site Dimensions Approximately 11.26 acres
List all potentially contaminated matrices Surface and subsurface soil, sediment, ground water, and residential surface soil
Range of Depth to Groundwater greater than 5 feet
Soil Types: (Surface) (Subsurface) Other:
Sediment Types: Stream Pond Estuary Wetland Other: Expected Soil/Sediment Moisture Content: (High) Low

1. EPA Program: TSCA (CERCLA) RCRA DW NPDES CAA
Other:
Projected Date(s) of Sampling Spring (April/May) 2013
EPA Site Manager Martha Bosworth
EPA Case Team Members

Site Name Jard Company Inc
Site Location Bennington, Vermont
Assigned Site Latitude/Longitude 42° 53′ 21.5″ north/73° 11′ 21.9″ west
CERCLA Site/Spill Identifier No VTD048141741 (Include Operable Unit)
Phase: ERA SA/SI pre-RI RI (phase I, etc.) FS RD RA post-RA
(circle one) (Other: Site Reassessment)

2. QAPP Title and Revision Date Site Assessment Program Site Specific Quality Assurance Project Plan for Surface and Subsurface Soil/Source, Ground Water, and Sediment Sampling Jard Company Inc, Bennington, Vermont dated 11 January 2013
Approved by: Martha Bosworth Date of Approval: TBD
Title of Approving Official: Site Assessment Manager Organization*: EPA
*If other than EPA, record date approval authority was delegated:

EPA Oversight Project (circle one) Y (N) Type of EPA Oversight (circle one) PRP or FF Other:
Confirmatory Analysis for Field Screening (Y) N If EPA Oversight or Confirmatory: % splits TBD
Are comparability criteria documented? Y N

3.									
a.	Matrix Code[1]	SS	SS	SS	RB				
b.	Parameter Code[2]	PCB Aroclors	PCB Aroclors	PCB Congeners	PCB Aroclors				
c.	Preservation Code[3]	5	5	5	5				
d.	Analytical Services Mechanism	DAS or CLP	DAS or CLP	CLP	CLP Non-RAS				
e.	No. of Sample Locations	125	38	2	21				
	Field QC:								
f.	Field Duplicate Pairs	7	2		0				
g.	Equipment Blanks	See RB	See RB	See RB	0				
h.	VOA Trip Blanks	0	0	0	0				
i.	Cooler Temperature Blanks	1 per cooler	1 per cooler	1 per cooler	1 per cooler				
j.	Bottle Blanks	0	0	0	0				
k.	Other:								
l.	PES sent to Laboratory	NA	6	TBD	0				
	Laboratory QC:								
m.	Reagent Blank	0	0	0	0				
n.	Duplicate	0	0	0	0				
o.	Matrix Spike	0	2	0	0				
p.	Matrix Spike Duplicate	0	2	0					
q.	Other:								

4. Site Information
Site Dimensions Approximately 11.26 acres
List all potentially contaminated matrices Surface and subsurface soil, sediment, ground water, and residential surface soil
Range of Depth to Groundwater greater than 5 feet
Soil Types: (Surface) (Subsurface) Other:
Sediment Types: Stream Pond Estuary Wetland Other: Expected Soil/Sediment Moisture Content: (High) Low

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix. Matrix Code[1] SO

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination Removal Actions
Nature and Extent of Contamination Human and/or Ecological Risk Assessment Remediation Alternatives
Engineering Design Remedial Action
Post-Remedial Action (quarterly monitoring) Other:

Draft DQO Summary Form 11/96

6. Summarize DQOs: Collect surface and subsurface soil/source samples from the identified source area (capped former building footprint and excavated staged material) on the property for PCB Aroclors field screening and fixed based laboratory analysis in source areas on the Jard Company Inc property. A subset of samples will be submitted for fixed laboratory analysis with a smaller subset submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Field Screening)	Above Background (Assumed to be ND)	0.2 mg/Kg
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	33 ug/kg
PCB Congerners	Above Background (Assumed to be ND)	20 to 100 ng/Kg

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
Positive Displacement Pump Faucet or Spigot Other:
Split Spoon Dredge Trowel (Other:) Direct sampling

Sampling Procedures (SOP name, No., Rev. #, and date)
List Background Sample Locations NA for source samples
Circle: Grab or Composite
"Hot spots" sampled: (Yes) No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O_2 Temperature Turbidity
Other:

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors (Field Screening)	EIA-FLDPCB2.SOP		PCBs
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
PCB Congeners	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
2. Other Approved Validation Criteria:
Validation Tier (circle one) I (II) III Partial Tier III:
Company/Organization Performing Data Validation Weston Solutions, Inc./START III (Prime) or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
Person Completing Form/Title G. Hornok/Lead Project Scientist Date of DQO Summary Form Completion 11 January 2013

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix. Matrix Code[1] GW

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination Removal Actions
Nature and Extent of Contamination Human and/or Ecological Risk Assessment Remediation Alternatives
Engineering Design Remedial Action
Post-Remedial Action (quarterly monitoring) Other:

Draft DQO Summary Form 11/96

6. Summarize DQOs: Collect ground water samples from ground water monitoring wells previously installed on and off the property for PCB Aroclors fixed based laboratory analysis. A subset of samples will be submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	1.0 µg/L
PCB Congeners	Above Background (Assumed to be ND)	100 to 1,000 pg/L

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
Positive Displacement Pump Faucet or Spigot Other:
Split Spoon Dredge Trowel Other:

Sampling Procedures (SOP name, No., Rev. #, and date)
List Background Sample Locations Ground Water monitoring wells TBD
Circle: Grab or Composite
"Hot spots" sampled: Yes No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O_2 Temperature Turbidity
Other:

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
PCB Congeners	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
2. Other Approved Validation Criteria:
Validation Tier (circle one) I II III Partial Tier III:
Company/Organization Performing Data Validation Weston Solutions, Inc./START III (Prime or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
Person Completing Form/Title G. Hornok/Lead Project Scientist Date of DQO Summary Form Completion 11 January 2013

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix. Matrix Code[1] SD

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination Removal Actions
Nature and Extent of Contamination Human and/or Ecological Risk Assessment Remediation Alternatives
Engineering Design Remedial Action
Post-Remedial Action (quarterly monitoring) Other:

Draft DQO Summary Form 11/96

6. Summarize DQOs: Collect sediment samples from a wetland located west of Park Street for PCB Aroclors field screening and fixed based laboratory analysis. A subset of samples will be submitted for fixed laboratory analysis with a smaller subset submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Field Screening)	Above Background (Assumed to be ND)	0.2 mg/Kg
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	33 ug/kg
PCB Congerners	Above Background (Assumed to be ND)	20 to 100 ng/Kg

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
Positive Displacement Pump Faucet or Spigot Other:
Split Spoon Dredge Trowel Other: Direct sampling

Sampling Procedures (SOP name, No., Rev. #, and date)
List Background Sample Locations Wetalnd area northeast of the Jard Company Inc property
Circle: Grab or Composite
"Hot spots" sampled: Yes No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O_2 Temperature Turbidity
Other:

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors (Field Screening)	SOM01.2		PCBs
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
Total Metals (including Hg)	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
2. Other Approved Validation Criteria:
Validation Tier (circle one) I II III Partial Tier III:
Company/Organization Performing Data Validation Weston Solutions, Inc./START III Prime or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
Person Completing Form/Title G. Hornok/Lead Project Scientist Date of DQO Summary Form Completion 11 January 2013

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix. Matrix Code[1] SS

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination Removal Actions
Nature and Extent of Contamination Human and/or Ecological Risk Assessment Remediation Alternatives
Engineering Design Remedial Action
Post-Remedial Action (quarterly monitoring) Other:

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6. Summarize DQOs: Collect surface soil samples from residential properties downgradient of the Jard Company Inc property and within 200 feet of the residences for PCB Aroclors field screening and fixed based laboratory analysis in source areas on the Jard Company Inc property. A subset of samples will be submitted for fixed laboratory analysis with a smaller subset submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Field Screening)	Above Background (Assumed to be ND)	0.2 mg/Kg
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	33 ug/kg
PCB Congerners	Above Background (Assumed to be ND)	20 to 100 ng/Kg

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
Positive Displacement Pump Faucet or Spigot Other:
Split Spoon Dredge Trowel Other: Direct sampling

Sampling Procedures (SOP name, No., Rev. #, and date)
List Background Sample Locations Residential properties located north of the Jard Company Inc property
Circle: Grab or Composite
"Hot spots" sampled: Yes No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O_2 Temperature Turbidity
Other:

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors (Field Screening)	SOM01.2		PCBs
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
Total Metals (including Hg)	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
2. Other Approved Validation Criteria:
Validation Tier (circle one) I II III Partial Tier III:
Company/Organization Performing Data Validation Weston Solutions, Inc./START III (Prime or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
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Matrix Codes[1] - Refer to Attachment B, Part I
Parameter Codes[2] - Refer to Attachment B, Part II

Preservation Codes[3]

1. HCl to pH ≤ 2
2. HNO_3
3. $NaHSO_4$
4. H_2SO_4
5. Cool @ 4C (± 2)
6. NaOH
7. $K_2Cr_2O_7$
8. Freeze
9. Room Temperature (avoid excessive heat)
10. Other (Specify)

N. Not preserved

* - To supplement Matrix Codes and/or Parameter Codes contact the QA Unit